

Current Notes

Vol. 10, No. 7

September 1990

A ACE

What To Do If a Virus Attacks

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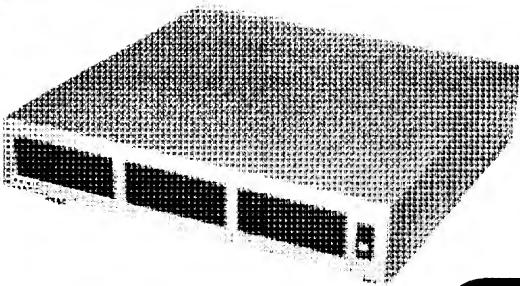
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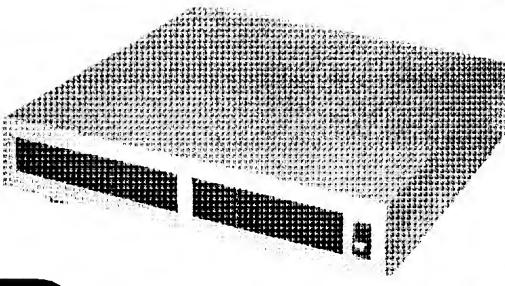
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by Joe Waters

More Bashing. Last week I was browsing through *InfoWorld* and noted with interest a couple of articles about a computer company we are all familiar with. There, detailed in black and white, was a series of, by now familiar, complaints. Developers were very upset; some complained that only eight of their lot were even making a profit. The marketing strategy, such as it was, was a shambles, with no apparent change in a continuing erosion of market share. The company record on customer service was terrible and customers were becoming increasingly upset. *Current Notes* readers, of course, have heard all of this before. But, this was not Atari bashing on a national scale. The company in question was Apple Computer.

Stacy4: Hands On. I am typing this editorial on the Stacy4 (as I keep an eye on Dr. Who showing on our late night public TV station). In keeping with the long established tradition in Atari computers, the Stacy is, in many ways, terrific, but includes some design flaws that suggest Atari still has some engineers who have never actually had to use a computer, or at least, one that they designed. The screen is much improved over early models and the keyboard has an excellent feel. The case looks stylish and seems sturdy and well constructed. This model contains a 40Mb hard drive that just can't be heard. It is the quietest drive I have every encountered, although certainly NOT the fastest. Of course, the arrow keys, number keypad, and function keys are much smaller than standard and in unfamiliar locations, but still usable.

So what's wrong? The trackball is very inconvenient. It changes the whole nature of working with your Atari. The ball moves perfectly fine, but the placement of the buttons makes using it quite awkward. The buttons are positioned above the ball. One has to move the ball with his thumb in order to press the buttons with his fingers. If the buttons were positioned to the left and down, the thumb could press the buttons while the fingers rotated the trackball. Fortunately, a mouse can be plugged in the side and users do not *have* to use the trackball.

In the back of the solid case, is a plastic cover hiding the standard ports. You can flip this cover open and let it sit under the case thus propping up the back of the computer about three quarters of an inch. But I wouldn't recommend this. The cover is a cheap, flimsy piece of plastic and does not lock in place or provide a firm base. Indeed, when I first tried this, the cover just slipped and tried to go back to the standard closed position. I say tried to, because the power adaptor cord

was plugged into the back and the plastic cover hit this plug and couldn't completely close. But the plug is a simple din connection and does not seat firmly into the computer. In fact, it can be dislodged very easily. So what? So, your power goes out whenever that pin is bumped. That means you lose whatever you were working on. This was probably designed by the same person who gave us the joystick ports *under* the front of the 1040ST.

By the way, there are no batteries supplied nor any way to use batteries in this Stacy4, although there is a cavity in the case where batteries would have gone. All power is supplied by a large external power supply. I am perfectly content to use this "portable" only when it is plugged into an electrical outlet. But why couldn't the power supply be in the case, perhaps where the batteries would have gone? Then we could also have used a standard power cord like those used on the other Atari models. Oh, well, why make things easy for the user?

On the whole, however, I find the Stacy4 functional and convenient. Not only can I do some editing while watching the Redskins game, I can take my whole system with me when I have to travel. And, when I travel, I can have a *Mac*, *PC-clone*, and an *ST* available in that box. This was the major reason I decided to buy the Stacy. I haven't tested that aspect yet, but will have several chances to do so before next month. I'll let you know how things work out.

New Products. Atari is not the only company with some new products. *Current Notes* is announcing a new product, in fact, two new products, this month. All of the public domain disks that we introduced last year, from July 1989 to June 1990, have been placed on a single SyQuest 44Mb removable cartridge. This 112 disk collection supplements the previous 350 or so disks currently available on a CD-ROM disc for the Atari CDAR504 drive.

In addition, the entire Spectre library, disks #S01 to #S80, is available on a SyQuest cartridge. This cartridge also includes the complete text of all of the Magic Sac and Spectre columns produced by Jeff Greenblatt and Doug Hodson from March of 1987 through July of 1990. These cartridges are priced at \$139.95 each. The CD-ROM disc can be ordered from CN for \$79.95.

As a by-product of preparing these cartridges over the summer, I needed to provide a thorough index to the programs on the cartridge. So, the first disk introduced in the CN disk library this month is a complete catalog of the nearly 500 disks in the CN library and a listing of the library description. Now anyone will be able to locate any of the 11,000 plus files in this library easily and quickly.

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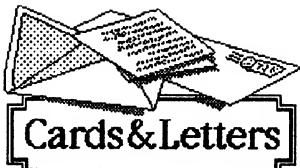
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No Gloom Zone Indeed!

Dear Mr. Waters:

I wanted to reinforce Dave Small's comments in his column "No Gloom Zone" in your last issue. I am presently Professor and Chairman of Electrical Engineering at the University of Maryland. The computing infrastructure of the EE Department at Maryland includes a network of 150 SUN workstations, about 50 IBM compatible machines, some 20 MAC's of various kinds, and an Alliant Mini-Supercomputer. On one desk in my office, I have a SUN 3/60 workstation, and on the other, where most of my work really gets done, I have a 1040ST. I also have another ST at home.

Why? There's really not a single most important reason, but I guess it all boils down to ease of use and power. Sometimes I think that if ST users really used all of these other machines, they'd gain a real appreciation for what they've got. Here's just a few of the reasons I choose to stick with the ST:

1) The operating system is burned into rom. Not just part of it but the whole thing. Just stick in an application disk and roll. No MS-DOS, no system or finder, nothing. Because the operating system is in rom, the ST is a perfectly viable working computer with only one disk drive, something that certainly can't be said about the Mac or an MS-DOS machine. What's more, the operating system works and is reasonably bug free. Those of you who laugh at this last statement have obviously not been subjected to an Amiga or to what happens when the latest version of UNIX is installed on a SUN network. Finally, virtually all software is compatible with all versions of TOS, something you certainly can't say about other computers.

2) The ST is quite fast, especially if one makes judicious use of third party software blitters and other tools. We have a \$5,000 publishing program running on our SUNs and the screen refresh rate can't compare with *Calamus* or other ST DTP programs, even taking into account the big SUN screen. Dave is right on the money when he lauds the ST hard drive DMA port. Nothing else really comes close.

3) ST software, especially the second generation programs like *Calamus*, *DynaCADD*, *PageStream*, *LDW Power*, *Script*, *Outline Art*, *Touchup*, and the like, is both powerful and astoundingly cheap. If you wish to compare *Excel* and *LDW Power*, first compare the price. Have you ever tried to buy a spreadsheet for a SUN? If there's something you can't find, you can support Dave or one of our other developers by purchasing an emulator. No other machine has the range of software availability of the ST if you are willing to emulate other machines.

4) The ST's graphics capabilities are just fine, thank you. I get the impression that many users envy the Amiga's graphics, but, of the two, the ST is the only machine with a really usable 640 x 400 mode. Without the ST's high-res

mode, desktop publishing and other graphics-intensive applications like CAD are almost impossible. Finally, the ST's color monitor is just plain better than the Amiga's, at least in my opinion.

5) The ST is a super game machine. That's right, I said it and I mean it. I have two sons at home and I'm not about to have a computer for me and additional hardware for my kids. Oh, I almost forgot to mention that my wife loves the ST. Why? Because she can use it, thank you.

6) The programming environment on the ST is excellent. There are compilers for almost any language you may need and most of them produce good clean code that runs without a hitch. In addition to the excellent C compilers, we even have *STOS* and *GFA Basic* for those of use who want to get some work done (or have some fun) without getting too deep into the internals.

7) My final reason for sticking with the ST is related to one of Dave's points. The ST community is both large enough to support the development of useful applications and utilities and small enough that I can keep track of what's going on. As Dave put it, if a neat new utility is sent out on GENIE, most active ST users in this country are using it within two weeks. I remember sending a note to J. Andrzej Wrotniak reporting a small bug in an early version of *El-Cal* and having him come to my house a few weeks later to personally confirm and fix the bug. What would be the chances of that happening if I was reporting a bug in a Mac software product?

Well, this has gone on long enough. Thanks for your hard work on *Current Notes* and for helping to keep me interested in the ST.

William W. Destler
Professor and Chairman
Electrical Engineering Dept
University of Maryland

We Needed That!

Hello Dave Small,

Not only could I not have said it better, I could not have said it as well either. Thank you for an excellent perspective from which to view the world or Atari; to the consternation of fellow workers I have far too often commented on, as human beings just how easy it is to gripe about a particular set of circumstances, how difficult it is to say the kind and good things. It is a position that I have fallen into and must continually remind myself that while everything may not be as good as I would like, they generally are never nearly as bad as I sometimes believe.

I congratulate you for the powerful way in which you directed your comments, and on the clarity and conciseness as well. Speaking in an editorial fashion, 'THANKS DAVE, WE NEEDED THAT!"

It is also my pleasure to say that I have learned much, and enjoyed reading the many subjects you have written that have been published in *Current Notes* magazine since I started reading it. Thanks a lot, glad to know you will be

continuing to write; I wish you continued success with current and future projects. To me it is clear that you, Dave, and those around you work very hard and are deserving of it. Best wishes to everyone.

Hello Joe Waters,

You have read my comments, which have already been sent to Dave Small, but I wanted you to see them and to know also that I really appreciate the hard work that you and others do to produce the magazine. I believe there is nothing wrong with taking the readers to task occasionally, Dave was on the mark with what he wrote, and you were too for publishing the same. We users of Atari products have too often tolerated the voices of unreasonable and immature dissent to go on unchecked, for which we may then all be branded with the same iron. If we allow it, then we deserve it.

Since becoming a subscriber of *Current Notes*, I am pleased to tell you I look forward to every issue; quality in content, humor and information, instruction and criticism seem to me well balanced. While other magazines may equal *Current Notes* output, (and I'm not saying they are), they surely are not any better. Thanks Joe, **thanks everyone** for a fine magazine!

Gary C. Matteson
Norfolk, Nebraska

Why Don't Dealers Advertise?.

Dear Joe:

I'd like to repeat what I once said to you on the phone. I very much appreciate what you and Mrs. Waters, editor Sommers, and all the other contributors to CN are doing to keep the rest of us informed. It's a great journal, very helpful, and the latest issue, July/August, is no exception.

Despite Dave Small's *No Doom Zoom* article, I believe you are performing a major function of a users group publication in keeping the readers informed, straightforwardly, of developments concerning the manufacturer, its products, and the available software. The group represents the interest of the membership, and should not be a tout for the producer. You've performed that role honestly and well. If you sound a bit pessimistic at times, so be it. Various articles in the July/August issue reflect this principle.

As to Dave Small, I enjoy his articles, I appreciate his writing them and your carrying them. I have tremendous respect for him, his achievements, his energy, his broad interests, and generally the quality of his writing. I understand the major point of his article, the problems of a small manufacturer having to compete in today's American market, even with top-notch equipment like Atari's. But as he explained at last year's Atarifest, he has a business interest in small non-MS companies in the absence of the vast competition of those serving the IBM-type and Apple markets. Add to that the fact that Dave's most celebrated achievement to date has been the creation of a successful, inexpensive emulator of the Macintosh, and the point of Atari's critics cannot have escaped Dave's sharp mind. Those who saw him at the Atarifest recall that he was

demonstrating *Spectre* on the STacy, a machine that is still not generally available.

It does those of us who are interested in a computer, rather than a toy, little good to learn that Atari is concentrating on selling computers in Europe and on selling the Portfolio, which looks like a nice slide rule--is there anybody around old enough to remember the slide rule?--and a game machine, the Lynx, in the United States.

Also, I believe the major problem is not the failure of Atari itself to advertise, but the failure of the dealers to advertise Atari. The Washington Post carries a local business section every Monday, replete with computer advertising. How many of your readers in our area can recall the last time they saw an advertisement for Atari by anybody in that section of the Post? The reason must be insufficient stock or insufficient profit or both. The New York Times is little better--one dealer. An acquaintance who enthusiastically sold me my Atari, switched to selling Macintosh a year later. That must have been some four years ago.

In Frank Sommers' article, I learned that Washington is the third largest user of personal computers in the U.S., and the first on a per capita basis. My question to Dave Small: How many people in the Washington area are going to buy an Atari computer if they don't know it exists? How much software is going to be developed for Atari machines in the American market when they aren't being sold? And how much of that which has been developed will be improved? This letter is being written on the *Word Writer ST* word processor. I read somewhere a month or so ago that Timeworks is no longer supporting *Word Writer ST*. I hope it's a false rumor. So, additional thanks to Dave Small for the *Spectre*, if only because of its role as insurance. While serving himself, he's been a benefactor to all ST owners.

A final point: When I bought my then newly distributed 1040 and discovered Novatari, I was overwhelmed by the enthusiastic atmosphere of the meetings, shared by 8-bit and 16-bit owners alike. I'm ever grateful to several people for their willingness to help. CN's monthly list of people available for assistance was most useful. The absence of that atmosphere and those listings today are evidence to me of the current paucity of new discoverers of Atari, for the reasons indicated above. All the more reason to thank you, Joe, and everyone associated with CN and the user groups in this area, particularly Novatari. And I would encourage you to keep up the good work.

Herbert Hammerman
Arlington, Virginia

About That Portfolio

I joined the computer world about a year ago with the purchase of an Atari ST 1040. I liked the price and only later realized just how small a market-share Atari had. But while I have been razed for my decision, I have consoled myself with two thoughts. The first came while I was trying to sort out the confusing field of XT's and PCs and ATs, RGB, CGA, EGC, VGA, 086, 286 and 386. What came to me was that no matter what machine I bought, it was already obsolete because some better, faster, more powerful machine

was in the process of being released. So the question of obsolescence, which so bothers some Atarians is, it seems to me, a false issue. No computer system that does what you want it to do is completely obsolete; something the 8-bit users have been trying to remind us for years. The other thing I realized and take some comfort from were the computers some of my acquaintances have chosen--computers that make my choice of the ST seem wise by comparison. One friend, a professional writer, collects Kaypros, a 64K CP/M. His rational is that, he can get them cheap, and nothing he writes has ever exceeded the limits of its memory. I think he has four in use--two in the office and two for at home. The other acquaintance bought a pair of computers I'd never heard of before, close-outs called "Cat" from either Canon or Casio, I forget which. These were 68000 based machines, which came as a surprise. As for the lack of programs, he planned to write whatever he needed. Compared to them me and my Atari are strictly middle of the road.

When I first started reading the ST journals I noticed much concern over this "just a game machine" bias against the ST and can well understand it. It is silly to disparage a computer that has the same set up and power as the MacIntosh, as the ST does, just because its manufacturer once made video games. So imagine my confusion when, at my first user's group meeting there's Bob Brody giving his dog-and-pony talk getting acclaim for showing a commercial for the Lynx, which commercials only played in New York. Well New York isn't the world, and the Lynx isn't going to help the ST shed its self of the "Games Machine" onus. Who cares that it's hard to find, virtually unknown and has only a few games available. It's not a computer, either.

The "Junkyard Pussycat" gives the Portfolio guarded approval, sure indication that he doesn't work for *Consumers Reports* which didn't think much of the Portfolio at all. Too small, they say, for touch typing, yet too heavy to carry in a coat pocket. On the other hand, I never learned to touch type and I'm hardly alone on that. Typing with two fingers comes naturally to me and thus I find it easy to adjust to the Portfolio's small keyboard and have become quite proficient at it. As for the weight, it's still a lot lighter than other so-called laptop computers (luggable seems more like it).

But while the Pussycat thinks Atari may have a winner on their hands, two things will go far to scuttling yet another fine innovation. One is the problem with battery life. That it's pathetic is the mildest one can say about it. My experience has been that it eats a set of alkalines about once a week. I switched to some rechargeables and those don't last half a week. Switching batteries every day or every other day does not make for a CONVENIENT portable computer. I've heard that other laptops measure their battery life in hours not days but that's not very reassuring.

The other thing that's going to hurt the Portfolio is the lack of software. I bought mine in April and at the time asked if there had been any software written for it yet, thinking that it had been on the market for six months and

that if its operating system was so close to MS-DOS it would be a snap to port programs over to it. The answer I got was no (Actually the answer I got was a lot of hype about how I had all the programs I'd ever need already stored on ROM in the computer. It doesn't help my peace of mind to realize that I bought my computer from a man with all the personality of a Used Car Salesman. Hi, Mike). *Consumer Reports*, of course, had a few programs in mind when they looked at the Portfolio--like a Trip Expense Account. Sure that's just a spreadsheet program and there is a built-in spreadsheet but businessmen more than likely aren't interested in learning to write spreadsheet programs. They want something they can just pop in and fill in the blanks. They undoubtedly would not mind having something to do with their Portfolios during those long flights to nowhere, or while waiting for appointments; in short: games. I use the Portfolio largely for writing letters and reports and would be interested in a spelling checker program. While the Address Book function can be used as a database manager, it would be nice to have a real one. Until Atari can deliver on these software needs, the Portfolio will remain an expensive toy.

That the Portfolio's
battery life is pathetic
is the mildest one can
say about it.

for writing, which perhaps explains why the batteries last for such a little while. I am bothered by one thing, which is that I almost never get a Low Battery warning message. In most cases the first I know that there's a problem is when I go to use the computer first thing in the morning and nothing happens when I press a key. It's not enough that it uses up a lot of batteries it adds insult to injury by never warning of the need. Since there was no hint of trouble the night before this really gets my goat. I have wondered if it had something to do with file transfers the night before but I always use an AC adaptor for that, having learned the hard way about what file transfers do to battery life. Also I wonder whether there's any savings in battery life if one shuts the computer off before closing the lid, or saves the file one's working on before shutting it off, or in saving the file and exiting the program before shutting it off.

Well, I've gone on long enough. I greatly enjoy *Current Notes* and find it a handsomely produced magazine, a sterling example of Atari desktop publishing. I particularly enjoyed the reprint of David Small's article about why he learned assembler. Small is a rare man able to write engagingly about complicated and technical issues. He was the chief reason I subscribed to ST World, which sadly, has yet to deliver on its subscription.

Brian Earl Brown
Detroit, Michigan

Quick ST II Quirks

Your June 1990 issue of *Current Notes* contained an article by Andrzej Wrotniak regarding the merits of **Quick ST II**.

After installing *Quick ST II* everything seemed to be fine. And I did enjoy the picture background rather than the dull gray desktop normally achieved.

However, I discovered that my import of graphics into *PageStream* would no longer work . . . the program simply bombed when trying to import a picture. It was only after calling tech. support at *PageStream* that I was given the clue that it might be a conflict with some accessory or auto folder program. Since *Quick ST II* was the only program recently installed I tried eliminating it first and found that *PageStream* would once again import graphics all right. Then I tried eliminating only the picture background . . . but that did no good. Only complete removal of *Quick ST II* would allow graphic import to work.

This might sound like a limited memory problem. However, I have 4 megs of RAM so I doubt if that is the case. I also have TOS 1.4 and did not know if that has anything to do with this problem or not.

I was about to give up in despair when a friend suggested that *Quick ST II* might need to be the LAST program in the Auto Folder. I could not find an instruction to that effect anywhere . . . but it worked! Now I have *Quick ST II* installed with a picture background and can import graphics into *PageStream*.

It is unfortunate that so many programs demand to be either the first or the last in the Auto Folder. They can't all be! Anyway, a duplication of my frustrations just might be avoided if this word could be spread to other users.

Ray Arthur
San Jose, California

DOS and DS Disks

Dear Editor,

I have been a faithful user of a 1040ST (and now a Mega 4 as well) for two years. Because my husband is in the Air Force, and works with IBM's we have been using emulators for most of that time. We use both *PC Ditto* and *PC Speed* and have been very pleased. However, there is one small thing I don't understand. In both sets of direction for the emulators, explanations are given for installing device drivers to allow DOS to access the ST's 720k double sided drives. While this method may have been necessary for versions of DOS below 3.2, it is clumsy to work with and entirely unnecessary in newer versions of DOS. The DRIVPARM command, which can be placed in the config.sys file has many different switches available, and has a built in default to 720k double sided drives if no F switch is used. When the line DRIVPARM=D:0 is used in place of the recommended device driver line DOS comes up recognizing the double sided drive. This saves time in booting, as you don't have to wait while the external device drivers load and it increases productivity since it does away with the need to

switch from single sided "A" and "B" drives to double sided "C" and "D" drives. A second line; DRIVPARM=D:1 can be added for B drive). Most of us with ST's are not familiar with MS-DOS so we rely on the developers of those wonderful emulators to help us get going. Why is it that this valuable piece of information has been left out of what are otherwise good manuals?

I hope this tip helps other DOS users in the ST world. I would like to thank all of you at *Current Notes* for a great magazine to go with a great computer system!

Robin Kozeluh
North Pole, Alaska

Anyone Seen Skyplot?

Dear Joe,

I am trying to locate a copy of an ST astronomy program called "Skyplot." The program was created in West Germany, and for a time at least was distributed in this country by a company called Robtek, Ltd. I have been unable to locate either a copy of the program, or the distributor. Can any *Current Notes* reader help me out? If anyone has any leads, he can get in touch with me at (202) 799-4492, or: 8212 Cedar Landing Ct., Alexandria, VA 22306.

John Godbey
Alexandria, Virginia

Who Has an Anti-Glare Screen?

Dear Sir or Madam,

At the suggestion of a couple of Atari dealers here in British Columbia, Canada, I am writing you to request some help in acquiring a particular accessory. I have been looking for an anti-glare/radiation shield for an Atari SC1224 color monitor for several weeks with no success. Dealers here in Canada are unable to locate a supplier for this item although several have assured me that in the past, this product has been available for the Atari monitor. The problem seems to be the slight curvature on the face of the Atari monitor. This requires a specialized anti-glare screen with the same type of curved shape for correct fit and suitable appearance. Apparently the newer Atari monitors no longer have this curved shape.

If you can supply me with the name and address of a supplier of this product, I would be very grateful. The outside dimensions of the monitor face are 12.5 x 10 inches. I believe these screens normally come in a 12 x 9 inch size which would be quite suitable if one could be found with the curved shape required for the Atari monitor. Thanks for your help.

Donald L. Polson
PO Box 788
Ucluelet, B.C.
Canada, V0R 3A0

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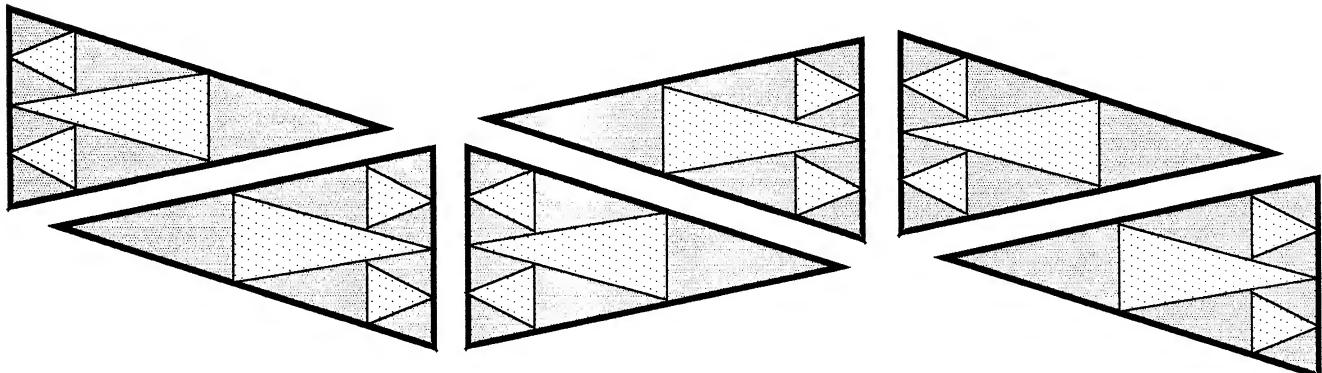
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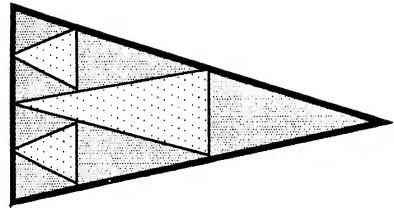
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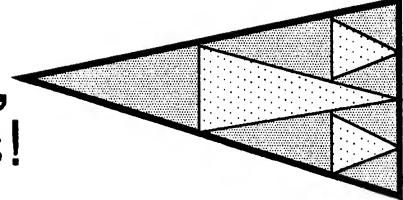
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New Leadership, Dynasties, Hardware Havoc, Personnel Moves, Another Dealer Departs

Apology

We wish to correct the record and apologize to Mr. Ames-Klein of Atari. We noted last month that he had been replaced by Elie Kenan and had been summarily fired. In fact, we are informed he is still one of the more valued individuals at Atari, and now will report directly to Kenan.

Dynasty

It was a hit TV show, a run-forever success. But that's TV. A recent analysis in the Business Section of the Washington Post of family "dynasties" in the world of commerce had some brief but interesting observations. See if you think some of them apply to one of U.S. Atarians' favorite topics, the Tramiels. First, the article about Washington family businesses dwelt on several that were in serious financial difficulty; and, of course, the question was, "Because of the family?"

One observation had broad implications. Only 30% of second generation family businesses survive. The successful transfer rate is even lower for 3rd generations--13%--and for 4th is only 2%. So the odds are, the Tramiel boys won't pass Atari on to their children. A former Yale professor and current research fellow in family-business management remarked that occasionally heirs liberate themselves from crushing expectations and lingering resentments by destroying the firms they inherit. But of broader interest is the fact that 60% of U.S. businesses of 50 or more people are family owned. Tie that back into the 30% successful transfer rate from the first to the second generation. It makes you begin to wonder about the future of U.S. business, i.e. 1/3rd of all U.S. businesses by extrapolation will not be successful. So

with that in the back of your mind, possibly your concern over the management of Atari by the "Second Generation Boys" will be a little more sympathetic than previously. The article also noted that at least one local firm would eventually have gone under, if it hadn't been for the son redirecting the course of the operation.

Is There a Phoenix for Atari

The door is closed after the group or individual enters. The office is inhabited by the President of Atari, North America, Elie Kenan (pronounced

and leave Atari. Kenan, etc., etc. In point of fact, there is no evidence that he has raised a finger to change anything or fire anyone, yet. He is talking to people, and asking them about their jobs.

Some people, outside of Atari, have already labeled him as a disaster, such is the malaise and discontent in the Atari community. Will he advertise the computers, or just the toys, i.e. Lynx and Portfolio, and possibly the TT when it appears? Will he go discount and mass marketing? Will he shore up the dealer fragmented, fast disappearing network or go mail order? Will he enhance Atari's tattered reputation among suppliers? Can he create an atmosphere where Atari is, in fact, "trusted" in the market place.

For now, these questions, which may be valid, seem premature. As of this writing he has not been on the job for 30 days. As the potential savior of Atari, U.S. he likely deserves a bit more time, before he makes up his mind and commences issuing policy statements and directives and showing his stuff. A lot rides on this man, for if he fails, then Europeans, who say that Atari is dead in the U.S., will be right. Dead and, in fact, buried. Do it, Mr. Kenan, do it! Pull them up out of the ashes!

Bashing, Prodding, & Reality

A White House correspondent, Brit Hume, has written in his computer column about a prominent PC magazine, pointing out that its objectivity lies in question when its editors review products they have helped the company develop, in this instance *Microsoft Word*. He also criticizes the magazine's staunch support of Microsoft's version 3 of *Windows*, noting that it obsoletes several generations of earlier IBM's, since only the 286 and 386 computers



Ke-NAN). Who was his predecessor? Actually, he has none, for he is the head of all of America, Mexico, and Canada, as well as France. Kenan is busy, busy looking over the holdings, including his small band of paupers or original Atari dealers. He is reported to be "fireproof," meaning he can't be fired by anyone but Jack and has complete autonomy to turn on the Atari market in North America.

Complaints, of course, have commenced and rumors are already curling around the corridors of Atari and the environs. Kenan doesn't answer telephone calls. Kenan takes people into his office and some of them come out

can run it at a reasonable speed. Now, some might call this magazine bashing.

You will remember in the July/August issue of *Current Notes* David Small gave a detailed, fact loaded onslaught against Atari bashers, pointing out in stinging sentences how Atari is no different in its blunders than IBM and Macintosh. So, by implication, lay off them. Small's article is obviously a labor of love, indicating that considerable time and effort went into it, relatively speaking. If you missed it, go back. It's worth reading.

However, we for one, found it contained a crippling fallacy. Small noted that, despite all of their mistakes, IBM and Macintosh continue to sell; and, thus, why shouldn't Atari, if we all get behind them. The leap of logic is that the two giants, while they are blundering along, and IBM's new PS/1 home computer may be another blunder, they also spend millions of dollars on advertising and marketing their products. Atari doesn't and thus their blunders live on as ghosts in their castle. In sum, we submit industry oriented magazines have a duty to remain the skeptical outside observer, if their readers are to expect their guidance and direction on products to be valid. That said, we hasten to add that all of us can get carried away, thinking that our prodding of a company will cause it to change.

Hardware Headaches

Every company has put out a machine or piece of hardware that malfunctioned and needed patches, fixes, or replacement parts. Recently, *pc ditto II* from Avant-Garde pops to mind.

Certainly Atari is no exception. The STe, newly released in the U.S. market, had problems booting in medium resolution. While this has been corrected, it is now experiencing serious and mysterious hard drive malfunctions. Mysterious in that the machine can go "wrong" on the first day, the second, or not for two weeks, and no particular hard drive has been identified as the culprit. One chap bought an STe at the

San Jose computer show on Saturday. On Sunday he was back with it and his scrambled hard drive. Purportedly, when Gary Tramiel, who in past weeks has become active in solving dealer problems with surprising speed and effectiveness, heard that the STe was scrambling hard drive directories, he declared the accusation a bloody lie. Yet, several days later Atari was instructing its dealers to send back any STe that had hard drive problems for a speedy repair and quick return.

Sometime during this period the STe was pulled off the market for a couple of weeks while they tried to sort out the difficulty with their newest product. A number of dealers believe it is a problem between the MMU chip and some drives and controllers. Atari maintains that it is not the MMU chip, but is not prepared to state what the problem is or go into any specifics. A curious attitude, to say the least, but they may have a problem on their hands with a third-party supplier.

The percentage of failures is hard to fix with certainty, but reports are that 80% of the STe's in Canada had HD problem. One dealer in the U.S. on the East Coast reported 8 out of 12 of his STe's were defective. Another reported no problems what-so-ever, and was perplexed about the report in *ST Informer* that the STe was something of a disaster. Yet this same dealer admitted that he didn't know if any of his customers had used the STe's they had sold with hard drives. A West Coast dealer confided he had had 100% returns. Percentages, of course, are one thing, and numbers of machines returned to Atari are another. Atari has advised its dealers to test STe's they sell with a hard drive before they leave their store and is doing the same thing with machines they ship to dealers.

But, weren't the Portfolio's shipping O.K.? Well, actually, no. They were also pulled off the market for a brief period. It seems that there had been advertising for them, showing the new menu program cartridge. When this wasn't immediately available Sam had shipments stopped until it could be included.

If that didn't give Atari executives enough of a Force 10 migraine, the just released Stacy's began cropping up with problems. One dealer reported that of five he got, four had problems. The problems seemed to be associated almost entirely with the screens; either a pixel was missing, or the two screens were separated slightly or the screen wouldn't work at all, while the machine would on a separate monitor. Contrasting this difficulty, was the machine obtained by the publisher of *CN*, which worked with no apparent defects. Apparently, Atari has acted quickly to set up a new testing procedure for all Stacy's leaving the company, to minimize what collectively amounts to something of a debacle.

Thank You, England & Germany

As the U.S. Atari market stag-nates, we have to thank our lucky Atari's for our active ancestors. As is well known, the ST's and Mega ST's are highly regarded machines in most sectors of the British and German computing world.

WordPerfect Corp., for example, is hoping to sell several thousand copies of *Word Perfect 4.1* in Europe. Thus, they have recently brought in two more programmers to work on the ST side of the business. One is the founder of Illiad Software. Following the coming maintenance update for 4.1 that was incorrectly announced as already released in WP's customer news letter but has not been, there will be yet another maintenance update. But of even higher interest, because of European demand for the product, there may be a *Word Perfect 5.1* for the ST sometime next year.

Several other software developers are continuing to develop games for the ST because they now have London or Frankfurt offices and the ST products, while sales are sluggish here, are doing quite well over there. So to our richer and wiser cousins we say, "Thank you," as we wait for a leap of faith or something here in America.

Top Ten From Europe

Dealers maintain the "sales rush" for a hot game, e.g. *Symcity*, lasts less than a month, and then, for many reasons, not just piracy, the "hot one" seems to lose its legs, as they say in the movie trade. Before American distributors can begin getting them out to dealers, European games are being sold mail order by quick to act importers, e.g. Sideline Software of Ft. Lauderdale, FL (1-800-888-9273). There mid-summer top ten: *F-19 Stealth Fighter*, (last month it was *F-29 Rattler*, now gone from the top 10), *Imperium* an *Empire* type strategy game, *Shadow Warriors* advertised as an awesome coin-op conversion, *Sim-city* (the city management simulation that won software academy awards in the spring and was number two on this chart last month), *Flood*, (which replaces the gone-from-the-chart *Escape From Robot Monsters*), *Starblade* in number six position, *Thunderstrike*, *Frontline*, *Khalaan*, and *Last Ninja II*, all arcade adventures. No longer top-ten material are *Brimstone*, *Resolution 101*, *Projectile Xenomorph*, *Klax* (arcade, soon to be out for the Lynx), and sword play with *Sir Fred*, and *Prophecy I*; all these were up there in June.

Dinner Time

Apparently, Atari Canada has every intention of avoiding the label of "mail order company." They seem to put real effort into the task of keeping their dealers enthusiastic, hopeful, and part of the team. Their most recent effort was on August 8th, in Toronto, when they wined and dined their dealers from all over the country, paying for the plane tickets for those from the far away west coast. Does it pay? Well, ask yourself. When there's a dealer in the area, are you more likely to buy one of his computers, than if you had to mail it in for servicing? In a similar vein, the successful PIP chain of 3,000 print shop franchises across the country held their annual convention in Reno, Nevada. The hit of the show? Transcoast Systems Inc., scored big with a Mega 4, Atari laser printer, and

Calamus DTP package that was thousands of dollars less than anything franchise operators had seen to date. Reportedly, it knocked 'em dead.

Font Lovers

Cherry Fonts of Canada may well be the Pigmaleon of the fonts world. Its owner, Todd Johnson, has created nine new font families for *Calamus* spending almost 200 hours in designing each font. He appears to be a craftsman extraordinaire and we hope to present an interview with him, using his fonts, in the next issue of CN. In the meantime his five font packages containing the above nine families can be had for \$42.95 each [Cherry Fonts, Unit #4, 2250 Tyner St., Port Coquitlam, B.C., Canada V3C2Z1 (604) 944-2923].

People On the Move

Michtron has lost George Miller, who, as a de facto chief of operations for the company, was effectively involved on numerous fronts, as Michtron moved up to become one of the more voluminous product developers and distributors for the ST's in the U.S. Rumors have it that Michtron is on the block; Gordon Monnier apparently confirms but declines to comment further. Presumably, Miller couldn't afford to wait when opportunity beckoned.

In his last chat with Atari management, which occurred before Elie Kenan arrived, apparently Charles Cherry found something missing that he considered important. But a few scant weeks ago, Cherry was billed as "the bright light," responsible for motivating developers throughout the Atari Corporation to a higher plateau of productivity. He established regular communication with them, got them lists of registered owners, obtained reasonable developers' prices for them on new equipment and generally commanded their complete respect, as a person who would tell it like it was.

Whether or not he, too, was drawn by an offer he couldn't refuse, or just encountered that "last straw," he elected to resign on the spot. Word in the community is that Cherry was the last

one of the promising troika of Crouch, Brodie, and Cherry that Atari management tried to put a "yoke" on. Some of the outsiders say he, for one, refused to march to the beat of the local drum. The formula has been approximately 90-days before the "new and the brighter" seem to lose their initiative and independence and become "stalwarts." However, word inside Atari is that Brodie has a plaque concealed in his office, inscribed in Latin "illegitimi non corborundum est" (colloquial translation, "don't let the bastards grind you down.")

Speculators are speculating that Riche Tsukiji is leaving his magazine, *ST World* and it may be up for sale. Local Washington sources say it is likely that Tsukiji will be coming to Washington at the turn of the year to work either in the White House or State Department on a new project to facilitate and expedite Soviet and Eastern block business with the U.S. But before that he will make an exploratory trip to the USSR to find out from the Ministry of Foreign Trade how the two disparate worlds of commerce might better interface with each other. *ST World* will continue to be produced by its current and some of its former members. But Riche in the White House? "Bodacious!" you cry? Remember John Sununu, the President's "chef de cabinet," is a computer devotee, and, in fact, has an ST.

Tid Bytes

Mass Marketing-The Portfolio is projected to sell 100,000 machines in 1990 with about 40% of that already sold. Atari has given top priority to bringing out software that will increase the handheld computers value, including spell checkers and even games, e.g. *Zork*. The Lynx will not be seen in Sears this year, nor will any other Atari computers. Apparently Sears is just too overloaded with inventory and is trying to cut back on the proliferation of brands that it carries. But Atari and the Lynx will appear in the Sears Xmas catalogue. Atari estimates that of the 400,000 Lynx that will be built for the U.S. market this year, about 1/3 of

them are already in the hands of users. Atari is still planning on having 22 games for the machine out by Xmas. Be that as it may or may not, the next ones to appear will be *Klax* and *Slime World*

Reticent S. Tramiel--Why would the President of Atari Corp. not boast about the clock speed of his latest computer, the TT, which will not be out in any number in the U.S. until next year. People in Canada, Europe and Australia are all saying that the TT has a clock speed of 32 MHz. Why deny it? Because in an attempt to avoid misleading the customer, Sam is striving to be accurate. The TT will run at what appears to be 32 MHz, but it will not have a 32 MHz chip in it, rather a DOV accelerator.

Divorce, Computer Style--Jim Allen of Fast Technologies and David Small of Gadgets by Small have separated. The excitement caused by their cooperation in developing a 68030 board for the ST was all pervasive, at least among the speed freaks, who understandably love their machines enough not to want them to be any slower than the fastest machines out there. As in any divorce, there are always two sides to the story. We only regret the fact. Both gentlemen represent two of the keener minds in our computer community. Small states he will continue with production of the board with another party. Allen was unavailable for comment.

And The Loser Is?--The Atari consumer in all probability will not see the Atari Adventure Package on dealer or other mass marketing shelves this year. Atari is "re-thinking" the idea of putting out a 520 STfm computer that can be played on your TV with an accompaniment of 10 quality software packages that would include word processing, games, data bases, etc., and all for \$300 plus. A grabber of a promotion, it had generated considerable talk before the question of availability of software to go with the packages was addressed.

Not Only Gas--The shortage extends beyond petrol. Although Atari

had announced several weeks ago, that supplies of mono monitors had been replenished and "never again" would Atari run out of them, as of mid-August there were reportedly 11 monitors left in the Atari warehouse and no new supply in sight until early September. And alas, color monitors had also been unavailable for almost six weeks. Presumably this shortage has been corrected.

Money vs. Computers

For some reason, a place in the sun in the U.S. market is not an Atari priority. Atari's claim is that they made more \$\$\$ last quarter than they did in the previous three months. So what's wrong? So..... Atari's stock on the American Exchange might not suggest that everything is O.K. In early August the stock hit a new low of 4 5/8ths, almost \$8 a share below its top of 12 3/4's. That can be real money if you have several million or more shares, as individual members of the Tramiel family have. Something seems to pull it back up over \$5 a share each time it sinks under that level. There is some speculation that the family is buying when it goes under \$5.

Super Game Machine

Nintendo knows it needs a 16-bit game machine to stay on top of the game market. So the curtain will come up on Super Famicon in Japan in the late fall. Its graphics and speed will do the job, Nintendo is convinced. Atari has a 16-bit game machine in the R & D palace, but it won't make the scene until some time next year. So, no matter how good it is, it will have two well-advertised competitors ahead of it.

A Sad Farewell to a Stalwart Atari Dealer

One of the remaining six Atari specific stores in the Washington area has closed its doors. Cal Com in Silver Spring, Maryland for five years had been a steady and consistent supplier of Atari goodies. Last fall it looked like "bye-bye," but Grant Slauson stepped in and bought the residuals and tried to

give it a genuine "huff and puff" to bring it back to life.

The wolf, however, was ever present. If you tried to get Atari to credit your account for Atari interface ads, that you place and they pay a portion of, six weeks might go by. It might only be a couple of thousand dollars, but life sustaining for contemporary dealers.

If you coupled this with Atari's accounting procedures, acclaimed by dealers nationwide as making Rube Goldberg look like the father of mathematics, other problems emerge. If your account is not balanced, Atari ships nothing to you. When that includes ST's which have been returned for warranty repair, which have already been paid for, you begin to have consumer problems.

In sum, lack of product, new products arriving too late to be capitalized on, and lack of concern for your dealers' problems, spell another dealer gone or turned into a mail order telephone number. In mail order, the low overhead and the lower margins lead to longer life, if not service.

This leaves the Nation's Capitol with two authorized dealers in the area --L&Y and Toad Computer, and three unauthorized stores, Discovery, Joppa, and ATN.

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Visits to Federated, Start, and Atari

One of the nice things about writing for *Current Notes* is that it is only printed 10 times per year, and this leaves summer and Christmas a bit less congested. So, in our little hiatus, I went on vacation. I spent a week in Newport Beach, California, with a friend, doing the things one would expect me to do--swimming, laying around, reading, and looking at women.

Federated

With all of that I found time to do some other things. It was brought to my attention by my friend's parents that there was a "100% Liquidation" at the Federated store in Costa Mesa. (For those of you who don't know, the Federated Group company was owned and operated by Atari until this year. They're still working some things out, but essentially they're gone.) So, figuring that there might be some interesting Atari things there, we went to the store and checked it out. As it turned out, they had lots of ST software - more ST software than they could possibly sell. So, being an astute businessman, I told the manager that I'd make him an offer for a large quantity of the software. They went off in the corner and mumbled about it for a couple of minutes and agreed that they'd give me 75% off of each piece. So I went through and picked out a bunch of software for the ST and eight bit and paid them and shipped it back. Word Perfect for \$42 is a good deal. All that stuff is for sale in my store now; there's nothing like bringing back a little piece of Atari's history with you.

Long Way Home...

When it got time for me to leave the Los Angeles area and return home, I ran into some difficulty. I mentioned in this column before that I fly "space available" because of my father's job with a company that is owned by the airlines. To make a long story short, there was no "space available." All flights from LAX to Baltimore were overbooked, as were the ones to Washington National. My only way to get home from LAX was to fly to Pittsburgh and then to Dulles, which is still about an hour and a half from my home (near Annapolis.)

I began to think about what would happen if I flew home via San Francisco. There were more flights from San Francisco to Baltimore than there were out of LAX.

As it turned out, San Francisco was a valid stop for my LAX to Baltimore route, anyway. And there are hourly shuttles which were "wide open" from LAX to SFO. Fortunately, I had friends to see in San Francisco.

Start Eats Antic

Once in San Francisco, I went over to Antic Publishing, the folks who bring us *Start* and *Antic*. I had a long talk with Tom Byron, the current editor of *Start*. (He took over the job after Andy Reese, the previous editor, cruised.) Tom's a nice guy. The big news around there is that they're undergoing a serious format change. Following the advice they garnered from their reader poll, they are going to be concentrating their efforts more on utility software and demos. They've got a new art director and a new technical editor, so their level of quality should become significantly higher than the high standard it's at now. Also, a big piece of news is that *Antic*, our old friend that started their whole company, is now history. *Antic* will be incorporated into *Start*, and *Start* will be bigger and enhanced as well, bringing the total number of pages per issue to around 120. Because of the format change, *Start* will not have a September issue, and the October issue will be the first of the new format. Everybody there was very excited about the format change, and I think it will be successful. Incidentally, Tom sees the high quality British magazines which have invaded the US as their biggest competition. "You have to wonder if they're government subsidized or something," he said.

Start has also picked up *Analog* and *ST-Log*'s subscriber list, so if you were on that list, expect to hear from *Start*. *Start* will also start using a Mega 4 DTP system, running *Calamus* with Compugraphic fonts, to produce the magazine. They'll be printing on a Linotronic typesetter, as a local service bureau has a Mega 4 with the *Calamus* Lino interface hooked up. That's my dream arrangement. *Start* may begin coverage of the *Lynx* and *Portfolio* as well, becoming an all encompassing Atari Magazine. Antic Publishing, which publishes an Amiga mag as well, is starting a magazine called *PC Home Journal* to complement the new IBM PS/1 computer.

They took me out to lunch, which was a really nice thing to do. We went to a restaurant called Embarko,

where they bring you the bill enclosed in a little wax paper bag. Tom put his American Express card in the little wax paper bag. The waitress was amused. Thanks much to Michael Evans (my advertising contact at STArt), Tom Byron, Amy Johnson, and Denny Riley.

Atari--How Romantic

Michael took me over to the CalTrain station, and Bob Brodie from Atari kindly agreed to meet me at the station in Sunnyvale. Bob took me out to lunch, which was a really nice thing to do. (I'm a growing boy.) Elie Kenan from Atari France was at Atari that week (the 31st of July) examining operations and making suggestions on how to streamline things. Bob sure wanted to help him, but when Elie asked Bob to write up what he thought his job description was, he was a little overwhelmed. Bob's been doing anything he considers important—which sometimes covers far more than just dealing with user groups, his defined function. Bob was also trying to get equipment ready for the San Jose World of Atari show to which, because of Rich Tsukiji's scheduling games, Atari decided not to send anyone. They just agreed to provide STs for use there. Ken Badertscher, whom Bob introduced to me as "the TOS god," was considering going, but it was pointed out to him that he'd have to pay the admission fee.

I had a long talk with Art Morgan, Bob's current officemate. Atari **really is** coming out with a new laser printer, which should have a street price of around \$899. It's based on the Tokyo Electronics Corporation engine, and it will look very similar to the Epson EPL-6000. Because TEC has an HP Laserjet emulation card, it's very possible that Atari may sell that for this new laser, making it good for things other than a doorstop when not attached to an Atari DMA port. Yes, it will work the same way as the SLM804, through the DMA; the printer will have no brain or memory of its own. I don't know if software currently available for the SLM804 will be compatible with the new laser, but a new driver should cure it if it isn't. A new Diablo emulator, ver 1.4, is in the works for the new laser. The printer should be available before the end of the year.

I really wanted to see a TT, but Bob couldn't get Leonard Tramiel's permission to let me in the engineering department. I think he's still mad at me for beating them to market with a SyQuest drive, but that's neither here nor there. I got a spec sheet though, and it's just what everybody thought. It's possible that the TT may end up being a "mock" 32 MHz machine, where the processor is internally running at 32Mhz, but the bus is at 16. Just like a Fast Technology T-16 in an ST. The monitor for the TT will most likely be made by Philips, not Moniterm as I had said before, although most of the early showing was done with Moniterms.

The STe and its hard disk problem was stumping Ted Mack, the service manager. They're not sure what's up with the machines, as only some of the machines are goofy. By the time you read this they may have figured out what's going on, so I'll decline to say more other than that many STe's really do have a hard disk problem. ICD and Supra are offering fixes which counteract the goofiness of the STe, so check into that.

On the subject of RAM, the Stacy was originally designed to use SIMMs as the STe does, which is why there's a little door on the bottom of the machine to give access to the RAM. But SIPP's, goofy RAM chips were used instead. So, pay no attention to that little metal door behind the curtain. The Portfolio 256K RAM enhancements exist, but there's no way for the operating system to access them, so they're scrapping the idea. Darlah Pine, from GEnie, says she has one and it works, but one wonders what she's using it with. Atari is designing a notebook-sized version of the Portfolio, with bigger keys and screen and presumably real-memory-upgradeability this time.

Art said they were working on a 68000 based game system, similar to the Sega Genesis, but it will **not** be ST based. No word as to what the deal is with that machine, but keep your eyes open—it should be fun to see how they expect to compete in that very tight market once more. Lynx advertising is supposedly working well to sell machines through different chain stores. They've got ads in Rolling Stone and many other popular mags—but they're still giving their faithful computer dealers **terrible** pricing on the units. Come on, Atari, give your best supporters a break.

Atari is considering moving. They're leasing the building they're in now in Sunnyvale, and if Elie Kenan gets more power, it would be much more convenient for him if Atari US lived somewhere in the east since he's with Atari Canada and France. It'd be just as well if they did move anyway; their present location sports a wooden off-white sign with the Atari logo on it, the paint peeling. Edgar Allan Poe wrote an essay about how to create a romance. He said that there were two elemental components in a romance: a beautiful woman and decay, preferably of the beautiful woman. It's no wonder we're all so drawn to Atari; how easy it is to be in love with a company with hardware so beautifully wonderful and full of possibility when the company, even its sign, is in such decay and disrepair. Sam Tramiel even had a slinky black Corvette XR-1 sitting in front, with an Atari sticker in the back window. I touched it. How romantic.

After I had been there a good while and had a real good time talking to everyone, Bob offered to take me up to the San Francisco airport, which is about 40 miles from Sunnyvale. I took him up on it, on the

condition that he was sure he didn't mind. That was a really nice thing for him to do; the next time you want to rag on Atari, consider that these are real, nice people you're talking about. They're here to make a living and do what they have to do. They're not perfect, sure, but it's not necessarily our place to tell them how to do things. This is a rough business, and it's definitely best to be nice and offer constructive advice only.

The Questions

Upgrade That Supra. When I first started this column, I did a four part series on hard disk drives and how to hook them up to the ST. Well, on that note, Martin Madore sent me a question on GEnie on that subject. He wants to know how to upgrade the 20MB mechanism that lives inside his Supra 20MB to something bigger. He reports that the mechanism inside seems to be a Miniscribe 20MB SCSI drive. All that's necessary is replacing that SCSI drive with another SCSI drive, like the Seagate 1096N 80MB drive which is available for around \$450. Just plug it in and format it. Any SCSI 3.5" hard drive should work just fine.

Bye-bye Eight Bit. Duane Brankley from Richmond, Virginia, tells me that he's going to be upgrading from an 800XL to a 1040STe, and he's curious what software he should have for telecommunications and word processing, spending as little possible. My recommendation is Flash (typically around \$19.95) for telecommunications, although the public domain program Uniterm is quite excellent. For word processing, if you want super-cool features, get Word Perfect—it runs around \$149. Otherwise, stick to Word Writer ST (around \$49) or just go PD and get ST Writer or one of the many PD word processor/text editors which exist. One thing which is really true about the ST is that you really can get by on either PD or shareware programs for many applications--a nice thing to be able to say about a machine.

Over the Rainbow TOS. Anthony DiPietro, whom we've heard from before, has a few more questions. Is TOS 1.4 worth the money? I say yes. The removal of the 40 folder bug, the quicker screen display, plus the general system speed increase make it a must in my opinion. I get really annoyed every time I have to use a machine without 1.4 in it. Admittedly though, in my store, we've got all of our hard disk autoboot stuff geared to TOS 1.4, and whenever a 1.0 or 1.2 machine gets plugged in, there's no trying to compensate for their slowness. So, as a result, they're real slow. But you can improve their operation quite a lot with *Universal Item Selector*, *FATSPEED*, and *Pin-head*. So, judge for yourself. If you don't want to spend time loading auto programs, just go ahead and get 1.4. The 32-MB hard disk partition limit allowed in 1.4 is reason enough to get it.

GEM – Left Out to DRI. Mr. DiPietro also wonders if Digital Research is still developing GEM at all. Well, shortly after DRI introduced GEM for the IBM PC, they got their pants sued off of them by Apple, saying that it was a ripoff of their user interface. So the full-featured GEM we know on the ST was castrated, and became a very bland useless interface for the PC. If you get GEM on there now, it's pretty lame compared to the ST's version. No, I don't believe DRI is doing any more GEM development, especially for Atari. In fact, it was rumored at one time that DRI was almost dead from lack of business.

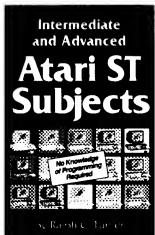
Thanks for the Memory. Anthony also wonders how much memory his 1040ST can access. Well, the ST's have an upper memory limit of four megabytes because they all use the same memory controller chip. They are capable of accessing up to two 16-bit banks of memory. If you wanted to use 4 megabit RAM chips, in theory, you could access 16 megabytes. I'm not very certain about that though – if anyone knows anything about that, let me know.

Moniterm Vikings. I just got a Moniterm Viking 2 19" monitor at home, and I was wondering if anyone knows how to make Flash work in full screen on it. If so, let me know.

Accosting Me. That's all for now. Remember—send us a question or even a thought provoking idea or argument and get a **free Current Notes public domain disk!** Everybody remember the WAACE Atari-fest, October 6th and 7th at the Sheraton in Reston, VA. It'll be a blast! Here's how to reach me:

Until we meet again

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Note: Even though Derek Mihocka has released the ST Xformer into the public domain, we feel it's important to pay Derek a royalty for every cable sold. It's our way of saying thanks for such an excellent product.

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You Just Bought a Spectre GCR!

Getting Started...

By Douglas D. Hodson

Last September I became a 20 percent owner of a medium size mail order company. I was just an investor at that time. In the past few months, things have changed. I am now the General Manager of this mail order company. I now answer the phones, take orders, and yes, try to answer all the technical questions. What's the name of the company? For this article it really doesn't matter. The point is, I see what sells and what doesn't and sometimes why.

The *Spectre GCR* is, without a doubt, the best selling piece of hardware we carry. The only products that come close are the Supercharger (IBM emulator) and Z-Ram memory expansion boards. All of these products go like hotcakes and they all have proven to be very reliable. All of these products outsell some of the most popular ST games! (Don't laugh, the ST game market is HUGE.)

So What? The point is, *many, many* ST owners own a Spectre. *Many* have **never** seen or used a Macintosh! There is a very large group of people out there who have never used a Macintosh and are trying to use *Spectre*. Our technical support line rings day and night with questions concerning the operation of *Spectre*. On a regular basis we receive calls asking if we could install the ROMs, write down some notes on how to get it setup, etc... There are a lot of people asking for assistance.

The purpose of this month's column, therefore, is to cover the basics of setting up a *Spectre* using the Spectre manual and Apple System software. You can, of course, purchase the Apple System software from an Apple dealer, but ST users may be more comfortable purchasing the software they need from an ST dealer. Because of this, and the large demand for Apple System software, I convinced 1st STOP Computers (oops, I wasn't suppose to mention the name...) to handle it. The price is \$49. You can also purchase the *HyperCard* software and manuals for \$49.

What Do You Get? The System software package is called *Apple Macintosh System Software Update Version 6.0*. In reality you get the latest version of the System and Finder in the package (as of this writing it's 6.0.5).

The System software package includes one large reference manual and four double-sided disks. The disks are titled:

- *Macintosh System Tools*,
- *Macintosh Printing Tools*,
- *Macintosh Utilities, Disk 1*,
- *Macintosh Utilities, Disk 2*.

The most important disk is *System Tools* because it contains the System and Finder files required for *Spectre* to work! With this disk in hand, you can be set up and running Mac software in minutes.

For this discussion I will assume you have a 40-megabyte formatted hard disk connected to your ST system. I will also make the assumption that you want to install *Spectre* on the hard disk along with some Macintosh software. Just to make things easy, I will make the final assumption that you have partitioned your hard disk into four equal sizes (i.e. 10 Meg per partition).

Spectre Installation

- 1) First, open the *Spectre* package. Install ROMs as described in the *Spectre* manual.
- 2) Plug *Spectre* into the ST cartridge port and connect the cable from the cartridge to the ST disk drive port as described in the manual.
- 3) Boot your ST.
- 4) Backup, move, or delete all software on the last partition on the hard disk. Since I am assuming you have four partitions (C, D, E, and F), this would be partition F. We will use this partition to store Macintosh software.
- 5) Create a "SPECTRE" folder on your hard disk partition C, D, or E. Do not create one on partition F: because we are going to use F: for our Macintosh software. Remember, the main *Spectre* software is ST software, not Mac software.
- 6) Copy the *Spectre* software disk (this is NOT the one titled "MAC PD DISK VERSION 1.0," it's the other one) into the SPECTRE folder just created.

7) Go ahead and run the program called SPECTRE.PRG.

8) After *Spectre* is loaded, go to the pulldown menu titled "Hard Disk" and select the "Format" option.

9) A listing of SCSI (Small Computer System Interface) devices is presented. Hit [Return] to continue. You will next be presented with four partitions which can be formatted into Spectre format. Select the last one on the list (i.e. the one we just moved all the software off of).

10) The next step will format the F: partition on your hard disk. If you feel comfortable with the previous steps, continue on and format it. If not, you may consider reading the *Spectre* manual for more details on this operation.

11) Now partition F: is ready for Macintosh software (it can no longer use ST software). If you have installed auto boot software on your hard disk, you may have to install it again. I have noticed that after formatting a *Spectre* partition, hard disk auto boot software will not work unless it is reinstalled.

12) Now we are ready to boot up our Macintosh, but not from the hard disk. The first time we boot up, we must use the System and Finder found on the System Tools disk. Go ahead and rerun SPECTRE.PRG and make sure the "Boot from HD" option is off. This option is located under the "Hard Disk" menu title. Be sure to remove all ST floppy disks from your drives (i.e. drive A: and drive B:, if you have one).

13) Hit [Return]. A box will appear on screen asking for you to "Insert System/Finder disk." This is where you will put the System Tools disk into drive A: and hit [Return]. This tells *Spectre* you wish to go into the Macintosh emulation mode. The screen will fade and a picture of a smiling Macintosh will appear. (A frowning Mac indicates the Macintosh can't read your floppy disk and, therefore, cannot boot up.)

Note: If you own a Mega ST you could experience some problems here. Some Mega's have problems reading Mac formatted disks from their internal drives. This will cause a great deal of frustration when trying to boot *Spectre*. It has been my experience that copying all four Apple software disks onto Spectre-formatted disks before you boot *Spectre* the first time will save you a lot of hassles. Use the "Format" and "Duplicate" options under the "Floppy" menu to perform this operation. After they have been backed up in Spectre format, just use these disks for booting and keep the originals in a safe place.

14) The Macintosh desktop should have appeared. You should see the icon for the floppy disk you just booted from located in the top right corner of the screen. You may also see another icon just beneath it.

If you don't see another icon, press the [F3] key on your keyboard. This is Spectre's way of telling the "Macintosh" you just inserted another disk. In this case, this disk is hard disk partition F: (a very large disk).

15) Now that both disks are usable by *Spectre*, we will install the System software from the boot floppy disk to the hard disk. To do this, run the program called *Install* and select the hard disk as the target disk to place the system software on.

16) *Install* will take a couple of minutes and ask for other disks in the System Software Update package. Insert disks as they are requested. After it's done, you can eject all the disks and reboot *Spectre*. Select the "Boot from HD" option so that *Spectre* will run without a floppy.

17) Pat yourself on the back, you have just setup a Macintosh in your ST.

Next month we discuss software and printer installations.

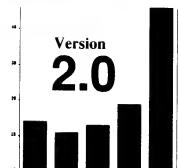
For all you Mac fans--Note: the complete text of ALL Current Notes Magic and Spectre columns by Jeff Greenblatt and Doug Hodson from March of 1987 is now available on CN library disk #481D.

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New Spectre CN Library Disks for September

by Jeff Greenblatt

This month, *Current Notes* is releasing 5 new PD and Shareware Spectre compatible (Version 2.65, 128K ROMs) library disks. If you like and use any of the files, don't forget to make your shareware donation(s) to the author(s). Here is a rundown of what each of the new disks contain:

S81D, Grendel 1.0, contains an interactive graphics/text adventure game created with the World Builder adventure game creator. The program also has digitized sound.

S82D, HyperStacks #9, contains 10 new Stacks for use with HyperCard or HyperDA. They are Food Chain, HomeCheck 2.0.3, HyperIcons 2.0, Leisure Time 90, Month Calendar, StackMerge, StackScan, Photo-Stack (R-Rated), Compress Plus and the latest version of Virus Encyclopedia.

S83, Utilities #13, contains AntiPan (Anti Panic virus disinfectant), Compactor (Compress your stacks, inc. Docs), Disinfectant 1.8 (virus detection and repair utility, incl. Docs), FileCloser 1.0 (force close a file or

application if it was left open for some strange reason), KillScores (remove the scores virus from your disks and applications), and Trash Patch V2 (change default location of trash can, includes Docs).

S84, Sounds #8, contains 6 new digitized sound resources to be used with SoundMaster or Finder-Sounds (on other CN disks). Most of the files are from the TV show, the Simpsons. They are Allrightee!, BBQ My Hamhocks, Einstein Turn Into, Getoutahere, Shutup Boy, and Why You Little.

S85D, EPS ClipArt #3, contains 18 new Post-Script ClipArt files for importing into your favorite Mac or ST Desktop Publishing program and UltraScript ST (use Tranverter to use them with ST programs). They are Apple, Friendly Postman, Home Fix-up Shopper, Ice Cream, Jazz Guys, Key Lime Pie Slice, Marching Band, Mercedes 190D, MicroPhone, Milk Pitcher/Cheese, Open Book, Pears, Satellite Dish, Scotty Dog, Sewn by HAnd, Spaghetti & Salad, Star-Grapes, and Still Life with Biscuits.



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S06 - PowerPoint	S63 - Utility 9	S10 - Stacks 1
S08 - Image Studio	S67 - Utility 10	S13 - Stacks 2
S12 - Full Impact	S73 - Utility 11	S35 - Stacks 3
S20 - MacDraw II	S79 - Utility 12	S37 - Stacks 4
S25 - MacMoney	Games	S61 - Stacks 5
S28 - DAtabase	S05 - Games 1	S65 - Stacks 6
S62 - PipeDream	S07 - Games 2	S70 - Stacks 7
S71 - Shanghai	S15 - Games 3	S72 - Stacks 8
Fonts	S24 - Games 4	S19 - HC Utility 1
S51 - PostScript1	S27 - Games 5	S33 - HC Utility 2
S52 - PostScript2	S38 - Games 6	S40 - HC Utility 3
S60 - PostScript3	S54 - Games 7	S56 - Birds
S80 - PostScript4	S66 - Games 8	Graphics
Utilities	S68 - Games 9	S18 - Graphics 1
S11 - Utility 1	S75 - Games 10	S45 - Graphics 2
S14 - Utility 2	S22 - Siegfried	S77 - Graphics 3
S21 - Utility 3	S46 - Everyman!	S76 - StartUp
S26 - FKeys 1	S47 - Phoenix1	Screens
S30 - Utility 4	S48 - Phoenix2	
S39 - Utility 5	S49 - Lawn Zapper	
	S50 - Dun of Doom	
	S58 - Clip Art 1	
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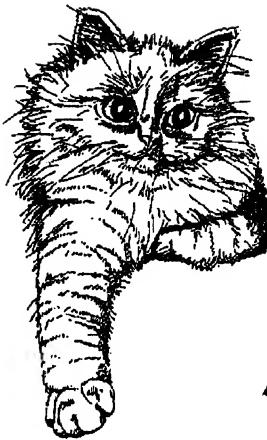
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The Junkyard Pussycat

by John Barnes

If "Business is War," as we so often hear, then the members of user groups are the irregular troops ("guerrilla warriors") in the campaign. Another term for these soldiers is "partisans," and Atari users certainly fit that description.

Unfortunately, many hardened veterans of the struggle seem to be abandoning their weapons and melting back into the general population. Serious declines in membership, old friends emigrating to other computer worlds, shrinking BBS rosters, declining message traffic, diminished disk library sales, all of these are verifiable symptoms of loss of strength for these bands of partisans.

A little looking around outside the Atari theater of operations has convinced the Pussycat that this phenomenon is pretty universal. Indeed, judging by the drop off in other kinds of volunteer activity, wars of national liberation may be out of fashion altogether. Such global matters are too big a target for the feline curmudgeon, so we will stick to Atari user groups for the time being.

User Groups Are Businesses

Perhaps the guerrilla warriors need to come down out of the mountains and don business suits. User groups are, after all, businesses that compete with other businesses for the public's time and money. Their "owners" are their individual members, who are also their "customers" as well as their "employees." The "profits" that they book are primarily satisfaction and pride in a job well done. The products the groups offer are help and fellowship.

In order to remain viable, user groups must take the same steps that successful businesses take. They must work to retain their existing customer base while seeking to expand it through better products and improved marketing.

Keeping the Customers

Too many user groups take a rather passive view of their customers. In a service-oriented business one

What's With The User Groups?

must learn to know the customers on an individual basis. Those seats at the monthly meeting need to be translated into names and faces with individual wants and needs.

Take a good close look at the existing membership list. Get to know the members and find a way to involve each of them in some aspect of "users helping users." Some members need to learn and others need to teach. Find out what problems they are having and try to find someone who can help them. Groups really should publish and distribute membership rosters to encourage communication among their members.

See whose membership is coming up for renewal or has expired recently. Contact these people. Let them know that you care about them. It may be possible to woo some of them back.

Many groups publish newsletters, others do not. If a newsletter is not practical, there should at least be regular postcard mailings to inform users of the meeting programs and upcoming special events. A newsletter does not need to be fancy. The regular press provides more than enough software reviews, tutorials, and corporate news.

Of course, people who have been turned off by inattention or a lack of interest will have to see that there is something worth coming back for. If meeting programs or the disk library have taken on a dreadful sameness, it is time to breathe some life into these activities.

The key to keeping people interested seems to be communication. It is not enough to provide a good product if the world does not know about it and if its users don't understand it.

Reaching Out

Any business needs new customers. People who are new to the program tend to be more enthusiastic. User groups that want to survive need to bring in new members. This means reaching out. Atari owners may be hard to find, but there are sources of names that

might be reachable. The Pussycat recently took a peek at the *Current Notes* subscription file and found lots of people who pay out \$25 a year for a subscription but who fail to take advantage of user groups that are close to them. They may have their own reasons for doing this, but they at least take some action to keep abreast of the Atari scene. It is not at all clear how easy it would be for a user group to persuade a magazine to lend them a list for selected zip codes, but it might be worth a try. Enthusiastic subscribers might be potent sales agents in the right setting.

BBS Sysops might also be willing to aid user groups in reaching independent users. This gives their members more options and keeps them involved longer. Dealers are another possible source. They are reluctant to release their mailing lists, but they might be persuaded to undertake a cooperative mailing with the user group paying part of the cost. Every local dealer should have a supply of user group flyers on hand. It might also be possible to enlist the aid of a friendly mail order house in enclosing a flyer with shipments of products. After all, user group members probably make purchases more frequently than other people.

Local computer shows and swap meets may also be good places to find people who own Ataris but who use these events as places to pick up cheap disk drives or other paraphernalia. Most show promoters encourage user groups to participate at very reasonable rates because it helps to fill up the hall.

Every effort should be made to capture the names of people who attend Atari shows. Full names and addresses should be required on door prize drawing cards, which should then be farmed out to user groups for follow up contacts.

Public notices should also be provided so that non-members can be made aware of the group on a continuing basis. Meeting notices should be posted on area BBS's to allow members of other groups to take advantage of special meetings and topics. This activity might also serve to convince some of the free spirits in the community that there is a benefit to dropping by the local user group.

All of this reaching out is tedious work, but it should be better than sitting around wondering why nobody shows up. This marketing effort may also focus attention on parts of the product that need improving, such as meeting programs or libraries. This outreach activity should be the number one priority of each and every user group. If the groups keep losing members at current rates, there will soon be nothing left.

What Is the Market?

Anyone who markets a product must estimate how many units can realistically be sold. If membership in a

user group is a "unit" of product, what is the potential market? How worthwhile is it to reach out as discussed in the preceding paragraph?

Reliable estimates place the number of Atari ST's in the US at 200,000 or so. If five percent of those people were interested in a user group, we would have 10,000 members in the groups. That would mean that the average *Current Notes* registered club (there are about 120 of them in the US) would have 80 members.

Since that seems high, we must conclude that user groups actually attract a much smaller percentage of the community. Monthly magazine purchases indicate that the number of people who regularly spend money on Atari products in the U.S. is closer to 40,000. This leads to the conclusion that there are some people out there who can still be reached. Obviously many of these people are "free spirits." They would not join a user group if it met in their living room. Others among them, however, might succumb to the lure, if they were kept aware of user groups' activities.

The Competition

Other businesses compete with user groups in the services they offer. Magazines and online services offer news and advice, mail-order houses offer bargain prices, PD software re-sellers offer inexpensive software. In those areas where good dealers exist it may be possible to get products and help on short notice. Because of economies of scale and access to good sources, these commercial outlets can offer more variety in these areas than user groups can.

A software author who posts to an online service can expect a couple of hundred people to download his wares and he will get very quick feedback on problems. The news tidbits that get posted online are spiced with immediacy. A gabfest with people from all over the country in an online conference is also a fun experience.

Quality, however, is another matter. A magazine article or an online message cannot communicate nearly as effectively as a 15-minute tutorial where the participants can get some feedback. A one-on-one discussion can often arrive at the root of a problem that is obscured by a lot of jargon in written materials. The entire content of even a formal online conference of an hour's duration could be conveyed in 15 minutes of presentation followed by questions and answers (which is one reason why only 25 people or so attend the online conferences).

A user with working experience is far more likely to understand a product and to approach it candidly than is a retail salesperson. The best products that the groups can offer are, once again, help and fellowship, with a sprinkling of community service thrown in.

The community service angle is one that only the user groups can handle. Shows are the most notable example. It takes organization, communication, and sheer grunt labor to put on one of these affairs. The Atari community will never be prepared to pay the price of contracting all of this out to professionals.

Mergers

Businesses sometimes undertake mergers in order to provide more effective allocation of scarce resources. The simple business of maintaining member rosters and checking accounts is about the same amount of work for a user group of 100 members as it is for a group of 10 and it might pay groups that are not too far apart to pool their efforts in this and other areas.

User groups usually focus on a limited geographical area. People won't come to meetings or join a disk library if they have to travel too far. User groups should, therefore, share their resources rather than simply merge together. Recent collaborative efforts by user groups in putting on shows like the Glendale effort, the WAACE venture, the New England effort, and the Detroit/Windsor affair are a commendable start. Some of the glitches that have appeared in these activities illustrate the need to maintain communication and cooperation year round.

This would be particularly useful in matters of program planning. A demonstration that works well at one meeting should go on the road to other nearby groups. This can only work if the leadership takes the pains to learn what is happening elsewhere.

User groups could also collaborate in forming Special Interest Groups, or SIGs. Individual groups might not have enough members interested in telecommunications, programming, or MIDI to schedule special meetings on a regular basis, but the people who are interested in these things might be willing to go out of their way if they knew that their particular interests were going to be served.

On the other side of the coin, the Pussycat has seen cases where the user groups resemble bands of Afghan rebels, more interested in bumping each other off because of religious differences than in overcoming the enemy. This is something that the current marketplace can ill afford. Every effort should be made to get these groups collaborating.

Management

Businesses must evaluate their management personnel and their practices. User group leadership might profitably be subjected to the same careful scrutiny. The healthiest groups make it a point to periodically bring new blood to the fore. The identification and

development of new leaders must, therefore, be a conscious, ongoing activity. User groups that are dominated by the contributions of a select few individuals can be unhealthy. It is monotonous to see the same people standing in front of the group month after month. Their tastes are unlikely to reflect those of the wider audience. Monitor the audience's attention carefully to see how the message is getting across.

While true experts are rare, it is possible to involve people as questioners, as planners, and as laborers. It is surprising how many people will undertake something if only someone would ask. Waiting for volunteers to appear is a waste of time. If the leadership believes in the task, it is worth recruiting someone to do it. Too many leaders take the easy way out and do all of the work themselves. While this may be more efficient in the short term, it hurts in the long run because there are no trained personnel when they are needed. Jobs like handing out propaganda at computer shows are not really demanding, but they do afford a sense of participation and an insight into the group's needs. Other people may have skills that could be used for handling meeting setups, posting notices on BBS's, or mailing out meeting notices.

Know the Product

Technical knowledge is an important component of every business. The product that an Atari user group is peddling is knowledge of Atari computers and related products. A group that fails to keep up with new hardware and software will soon wither on the vine as people go elsewhere for that knowledge. There are many products in the Atari marketplace that have not yet had a proper opportunity to make their impact. When a user group leader sees an announcement of a new product, he should make arrangements for a demonstration at an upcoming meeting. BBS traffic should be monitored for messages from people who have actually obtained new video boards, hard drives, monitors, software, etc. If the users are happy with the product they should be invited in to give a demo.

Perhaps user groups should maintain a literature collection and a magazine archive in addition to their disk libraries. This would help in digging out information on older products when a newcomer tries to do something that is a little off the beaten path.

A Nation of Users

Many of the above suggestions can be applied on the local level with only a modicum of imagination and elbow grease. Some portions may need national cooperation, as with solicitations using magazine subscription lists. Bigger groups obviously have more leverage and they can reach more people with a given amount of effort.

It would be nice to avoid duplication ("wheel spinning") and to share experience regarding approaches that actually work. Unfortunately, the national efforts that have been undertaken to date have not been intensive enough nor have they addressed the real problems.

Bob Brodie, Atari Corp's user group liaison manager, has been making an effort to reach out to the groups a few at a time as he tours the country for various reasons. Unfortunately, his other marketing duties do not leave him time to build a really solid network. Atari's last published list of groups appeared a long time ago and was out of date even then. It appears that there is no longer a newsletter going to group leaders. The groups themselves often fail to provide current data on officers and mailing addresses, so that communication with Atari seems sporadic in spite of good intentions.

The publisher of *Current Notes* has been making his own effort to compile a real list of user groups. This seems to be an ideal starting place for a genuine effort. The list currently contains 128 groups. It has been posted to GEnie, Delphi, and the Internet so that anyone can look at it. There is an incentive to keep this list up to date because the members of these groups get the magazine at a reduced rate.

Atari Interface Magazine started its marketing campaign as an adjunct to user group newsletters, offering to mail the magazine to interested group members at a very reasonable rate. It is not clear how well this effort has succeeded because they are now seeking other distribution channels.

Staff salaries, overheads, printing, telephone costs, and mailing could amount to \$100,000 a year for a one person operation devoted to user group services such as maintaining a list of members and officers coupled with a modest publication effort. This would clearly be inadequate, so that it must be supplemented by the labor of skilled and dedicated volunteers.

If 10,000 members sounds like small potatoes, consider the following statistics for an existing professional society which has a membership of 10,000: an annual budget of over \$4 million, about two thousand pages of journal articles published per year, and two annual national meetings, attended by several thousand participants.

It should be possible to devise some sort of an institution that falls between the mom and pop efforts that we now have and a truly professional approach to the problem. Let us hope that someone comes forth with the vision and the charisma to accomplish this before it is too late.



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STARTING BLOCK

by Richard Gunter

You've just bought your first hard drive system and removed it lovingly from the box. (Don't drool, please; it's bad for the circuits). Now what?

First, a small caveat: specifics in this column are based on Supra drives and software--because that's what I own. Can't try to get specific about things I haven't worked with.

Now let's take inventory. The carton should contain a manual, a floppy disk containing a bunch of hard drive utilities, and the hard drive itself. If you don't have a utilities disk, take steps to get one before going very far with your new hard drive. The utilities **must** be compatible with your equipment (specifically the "adapter" and controller).

Before hooking up the drive, take time to duplicate the utilities disk--it contains programs essential to using your drive.

Utilities, Utilities

The three most important utilities (for the Supra drives, anyway) are *supfmt.prg*, *supboot.prg*, and *suputil.prg*; your utilities disk should include programs with similar functions. Be a bit wary of all such programs--they can do most drastic things...

Supfmt.prg is the formatter. It can also be used to obtain some important information about the drive and "zero" the whole drive. Formatting means much the same thing as with a floppy disk, but there's an important difference. The hard drive formatter constructs logical divisions (partitions), which can be treated as separate drives, each having its own control tables.

Suputil.prg can zero individual partitions, locate and "map out" bad sectors, and enable/disable autobooting. "Zero" simply resets the entire drive's control tables, making it look empty. This is a very fast way of erasing everything.

Supboot.prg loads the hard drive handler **from floppy disk only!** Don't put this program on the hard drive at all--especially not in an AUTO folder. This program is used to gain access to a freshly formatted

Your First Hard Drive



drive, and to boot if autoboot is disabled.

There are other utilities; among them a clock set/read package (Supra units contain an internal clock), and an editor that allows you to manipulate the hard drive's control tables manually. Don't use the editor unless you really know what you're doing!

The First Time

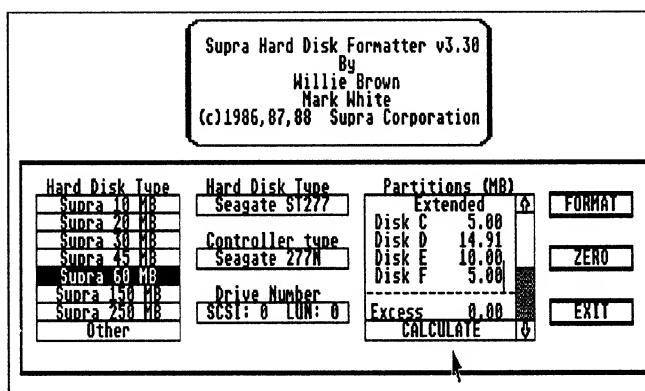
Supra's units seem to come from the factory already formatted, with some files on them. You may want to check them out; some may be more recent versions of the utilities on your floppy. Autobooting may or may not be enabled at the factory.

With the hard drive connected and the utilities disk in drive A:, boot your system. You should get a normal-looking desktop, with at least drive A:, B:, and C: icons and the trash can. Try opening the drive C: icon. If the drive has never been formatted, this probably won't work, in which case you'll have to format it. If the desktop display shows additional hard drive icons, autoboot may be enabled, or there may be a *desktop.inf* file on the hard drive; you should be able to open these icons and inspect their contents (if any).

The formatter program (may be a different utility in your package) will give you some info about the drive: type of mechanism, etc. More important for now is that it will also tell you about the current partition layout (see illustration). If the current partitions are acceptable, you don't need to format the drive at this time.

Formatting the Drive

To format the drive, run the formatter from the floppy. You should have decided how many partitions you want, and their sizes. Remember that TOS 1.2 and earlier versions can't support a partition bigger than 16 MB, so make your plans accordingly.



Some users don't like partitions, preferring to have as few as possible--I like to set up several, using the partitions as my first layer of data organization. Another consideration is that most hard drive backup programs are partition-oriented.

Smaller partitions take less time and fewer floppies than larger partitions. It's largely a matter of personal tastes and your backup strategy.

Formatting destroys everything that was recorded on the drive, so be sure that you've backed up anything you want to keep. The process can take up to half an hour or even longer, depending on the size of the drive, so make sure you've enough time to finish this step. It can't be interrupted.

After formatting, reboot from the utilities disk. You should get that standard desktop again. First thing you will need to do is install a drive icon for each partition you've defined and save the desktop. Use the "Install Disk Drives" selection on the "Options" menu, and make sure the *desktop.inf* file is saved to partition C:. I'm assuming drive C: will be your boot partition--that's the most common practice.

Create an AUTO folder on drive C: and copy into it the programs you want automatically executed--in the order they should run. Next, copy your desk accessories to the root level of drive C: (not to a folder). With this done, the basic stuff is installed on the drive. I'm making another assumption: that you'll be autobooting the hard drive.

Autobooting?

We've mentioned autobooting before, but now it's time to explain what this term means. When you boot from a floppy, *supboot.prg* needs to be in the floppy's AUTO folder. This program installs the hard drive handler in memory.

With this technique, programs in the floppy's AUTO folder are executed, but those in the hard drive's AUTO folder are not. Desk accessories are loaded from the hard drive however, and the system also looks for the *desktop.inf* file on the hard drive. As you can see, things could get a little complicated when you use a mix of both accessories and AUTO programs, especially when an AUTO program and a desk accessory are closely related. Autobooting simplifies matters.

When you "enable" autobooting from the hard drive (*suputl.prg* or equivalent), a hard drive handler is installed on the hard drive as a hidden file, and a boot sequence is written as well. (Yes, there are boot sectors on the hard drive).

With autobooting, *you don't need a floppy disk at all*. AUTO programs will be run from drive C: 's AUTO folder, and desk accessories and desktop are loaded

from drive C: as well. This is the preferred method. It's much easier than trying to manage separate sets of AUTO-bearing floppies *and* a single set of desk accessories.

In a previous column, I mentioned that putting a blank (formatted) floppy disk in drive A: will speed up the boot process a bit. This is because TOS always tries to read drive A: first thing, and it takes a few seconds to convince itself that nothing is there.

Enable the autoboot. Now, with your AUTO folder built and desk accessories installed, you should be able to boot from the hard drive. All that remains is to lay out your applications programs, data, etc.

Bad Sectors

When there are problems formatting a floppy, the normal practice is to throw it away; obviously you don't want to throw away that expensive hard drive. It's not uncommon for portions of a hard drive to be unusable, although there should be only a few "bad spots." Your utilities disk should contain a program that can identify and "map out" such areas. This operation modifies the drive's control tables to prevent the system from writing anything in the bad areas. They're ignored, and thus do no harm to your data.

Suputl.prg will do that for you. You have a choice of "destructive" or "non-destructive" mapping. The destructive option examines all sectors regardless of whether part of a file happens to be there. This could destroy files. The non-destructive option only examines unallocated sectors.

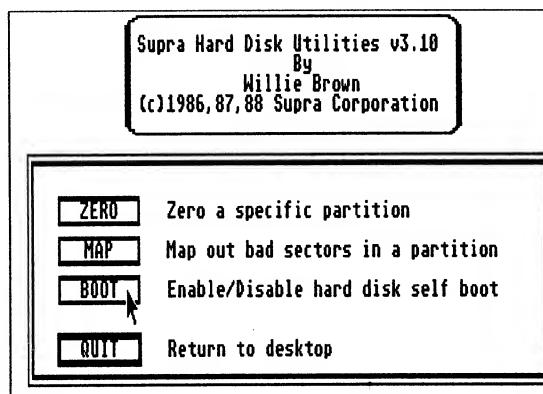
It's best to do this mapping operation right after formatting the drive--that way, you can use the destructive option with no risk of damaging data.

When Things Go Wrong

If you can't get a new drive to work at all, the first step is to check all the connections to be sure it's plugged in, properly connected to the computer, and that it powers up properly. The

Supra units are a trifle noisy--you can hear the cooling fan spin up and settle down to a steady hum, and you can hear the drive mechanism spin up as a higher-pitched noise of rising pitch, till *it* steadies down and gets lost in the fan noise. Kinda like listening to a jet engine start up.

Lastly, you should hear a few chuckling noises as the drive heads position themselves. Different sizes and brands of units will have somewhat different sounds, but you should be able to detect something.



If the connections seem okay and still nothing works, it's time to dig out the owner's manual and turn to the troubleshooting section. If that doesn't help, take the unit back to the dealer. He should be able to check it out for you.

If trouble develops later, the culprit could be either software or hardware (things do break eventually). Don't panic, and don't jump to the conclusion that the hard drive is at fault. User errors (yes, that's you and me) and software malfunctions are far more common.

Be suspicious of software that you've recently installed: especially new hard drive handlers, backup programs, defraggers, and the like. Some programs access the hard drive at a low level and don't work with all units.

A good defragmenter like *Tuneup!* can expose anomalies like orphaned sectors (allocated but not part of any file). Sometimes inspecting the contents of these orphans can give you a clue as to what's wrong.

Operating your system in bad weather can be dangerous, and not only because a lightning strike can fry your system. Power interruptions and voltage surges are more common under those conditions, and anything of this sort can do harm, especially if the computer is accessing the drive at the time.

Non-destructive mapping might get rid of newly developed bad spots, and if you have a recent backup, you might try destructive mapping or zeroing the troublesome partition(s). As a last resort, you might try reformatting the drive and restoring data from your backup floppies.

A person who really understands the hard drive control tables can often make repairs manually with a sector editor, but it's an iffy proposition. As a last resort, seek help from a qualified technician.

Adding a second hard drive to a system is another thing that could cause trouble; especially if the second unit is made by a different manufacturer. The hard drive hardware (adapters and controllers) and software used by one manufacturer are not necessarily compatible with what you already have. Check out potential compatibility problems before you buy the second drive.

The Back Door

Supra provides a "back door" in their utilities package; yours will probably work the same way. It's useful if you've managed to mess up your hard drive's boot partition to the extent that you can no longer autoboot from it.

First method: With the hard drive turned on, insert the utilities disk in drive A:, then boot while holding

down the [Shift], [Control], and [Alternate] keys. This will bypass your hard drive's AUTO folder entirely, and install the hard drive handler. The system will still try to load desk accessories from the hard drive.

Second method: With the hard drive turned on, boot the computer from a blank (formatted) floppy disk, holding down [Shift], [Control], and [Alternate] keys as above. You'll get a desktop with drive A: and B: icons and the trash can. Run *supboot.prg* from the utilities disk, and install a drive C: icon. You should now be able to access partition C:.

The first method is useful for getting rid of a bad AUTO program; the second allows you to get rid of a bad desk accessory. Both methods are useful as diagnostic aids.

Super Boot

I've sung the praises of this shareware program by Gordon W. Moore before. It's more than worth the \$15 fee he's asking for the current version (6.0).

Super Boot (not to be confused with a Supra utility) allows you to set your system configuration at boot time. You can activate/deactivate AUTO programs, desk accessories, GDOS "assign" files, and configuration data files (e.g., *hotwire.hot*) with a few key-strokes, or select a frequently used configuration with a single stroke of a function key.

Doesn't sound like much? Well, there are a lot of additional bells and whistles in *Super Boot*, but its ability to turn off an AUTO program or desk accessory that isn't working right can save you **lots** of heartaches.

A bad desk accessory is a nightmare; remember it tries to load every time you run the system. If it aborts at that time, how are you going to get rid of it? The back door method works, but it's rather a pain in the neck. With *Super Boot*, it's a snap.

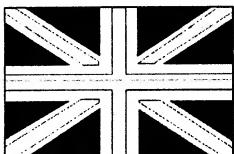
One More Thing...

If you follow this column, you'll have seen this suggestion before, and you'll see it again. Take small bites. Anytime you're trying something new, start small, get that working, then build from there.

Applied here, this principle has two main implications:

- Put only the most essential programs in your first hard drive AUTO folder, skipping the accessories altogether.
- After the AUTO folder works, add the most essential desk accessories.

With the basic structure in place, you can add to it easily and with confidence.



A Yankee Abroad

by Charles Warren

First, an introduction. I'm in the US Air Force, stationed overseas, in Britain, 75 miles NE of London,—and I washed my hands of Atari over a year ago. That's right; I finally got tired of the Atari joke.

A 1985 XL

I started my computer addiction as the proud owner of the TI99/4A, a nifty little unit with an interface box the size of a real computer required to attach a disk drive. I laugh now, but it got me hooked. I graduated to the Atari 800XL in 1985, after Nolan Bushnell had squeezed every penny out of his overgrown games company and chucked it to the wolves. I was stationed in Europe, then, too, and arrived back in the United States in eager anticipation of the software bonanza that I knew awaited me on America's shores.

But where was Atari when I arrived? Well, within the pages of *Creative Computing* I found tantalizing hints of an XL portable: the 1450XLD. It was even pictured, and years later I did see the relic at a West Coast computer show (not the West Coast Computer Show, which by then had become a creature almost totally PC, but an alternative gig hosted by Atari in San Jose).

Creative also mentioned a machine being developed by a former joystick company, christened with the amusing name of Amiga Lorraine. The Atari connection was that this beauty was designed by the then-god of the Atari chip-set, Jay Minor. For those of you who actually don't know what became of this baby, I'll keep you in suspense a few paragraphs longer.

But where was Atari when I arrived? Well, there was a fantastic

computer store in Sacramento, CA (if the editor doesn't mind a plug, I'll mention that ComputerTime is still fantastic), but they had started to sell ST software, and I was at that time quietly bemused by the ST.

Let me explain my situation. Apple had unburdened an overpriced black-and-white 'marvel' on the yuppie public (overpricing was even then a vaunted Apple tradition), and the public was actually buying it. The funniest part of the story was that some wit had turned a trackball upside down and called it a mouse, and even bored (and boring) PC owners wanted one!

I laughed for a month. I laughed for two. The trickle of ST software at ComputerTime became a flood. Jerry Pournelle, one of my all-time favorite SF authors, was unashamedly plugging the ST every chance he got in the pages of *Byte*. I became intrigued that so many idiots had become enamored of a plastic rodent (otherwise sensible people).

Time Bandit Sells the ST

Then I played *Time Bandit*. Until then I had been completely a text adventure addict. You know, the games where a few lines of prose appear on the screen, and then the user types in a clever response, supposedly simulating life? A chance to rack my brains to test my supremacy of the machine. And I was never distracted with the second-rate graphics that accursed the screens of my friend's computers, because I maintained that graphics not worth framing weren't worth displaying on a monitor.

Time Bandit was brilliant. It wasn't a text adventure, but it was an adventure. It gave me a chance

to rack my brains, to show my supremacy over the machine. And it had the most amazing graphics of any computer game of its time.

I bought an ST and rapidly became convinced that owning a mouse really was as important a commodity as floppy disk drives and color monitors (okay, I was slightly exuberant). I campaigned for all of my friend's to buy ST's, and eventually, one by one, they did.

But Atari Didn't Care

Then Atari dropped the ball. Some say it was when Jack put the Three Stooges in charge. Others say that The House That Jack Built was always built on air, and was doomed to fail once the Amiga Lorraine had been transformed into the Amiga 1000.

Now that I've spoiled the suspense, I can startle you with the announcement that I was never once jealous of the Amiga, not ever. It did have better sound and graphics, but it had one other thing that the ST didn't: a lousy OS. I hated the Amiga OS so bad from the first moment that I saw it that I swore I would never buy one. Odd, isn't it? I once felt the same way about the mouse.

I like GEM. It is a triumph of substance over style, whereas the Amigas OS is awfully darn pretty but just plain unfriendly. It isn't polished, either. The Mac at least has a certain sophistication, but the Amiga Workbench looks like it was drawn by kids with fat crayons. I'm not saying that GEM is perfect, but it puts utility before gloss.

My explanation for the death of Atari in America is that Atari simply

didn't care. Can there be any other explanation for saddling the public for so long with single-sided disk drives? In a nation dominated by MS-DOS and Macintoshes, any excuse to deride the maker of the 2600 games machine will be joyfully embraced. Can there be any other explanation for alienating all of your distributors by flogging ST's in retail chains like Toys'R'Us? Or for announcing products that either never arrive (the CD-ROM player), or, when they do arrive, are so bug-ridden that they instantly become infamous (*Microsoft Write*)?

Goodbye to the ST

During a stint in Korea, I sold my ST. I was bent on the purchase of an Amiga, but flirting a bit with the thought of putting out cash for a 386 PC clone with VGA graphics. What bliss, I thought. After all, there was a lot of software for both machines, and never again would I be bothered by people not fit to clean my floppy drive smirking that I owned an Atari.

I started to use the Zenith clone at work, outfitted with Windows. I drooled over the games on a friend's Amiga 500. I vacillated for a year. Windows felt like a kludge, not up to GEM's excellence. I still hated the Amiga's Workbench (the command line interface was okay, but too reminiscent of MS-DOS).

Hello to the UK STe

A year ago I washed my hands of Atari. The Air Force stationed me in Great Britain eight months ago. Three months ago I bought a four-megabyte 1040 STe.

What changed my mind? I changed my mind because in Britain, Atari cares. In Europe, Atari cares. Atari UK and Atari Germany are blessed with efficient, competent managers, and products ship on time. The single-sided disk drives, still a bane to (the very few) software developers in the US, have

been only a memory here for two years. Atari advertises here. Atari is a real *presence* here, not just a games company that also happens to produce a line of toy computers.

I recently attended the Atari 90's Show at Hammersmith, and the 16-bit Computer Fair at the Horticultural Gardens, Victoria Station (both in London). The ST figured in fully 100% of the booths (not surprising at the Atari 90's Show, I must admit).

Do I believe that Atari will resurrect itself in the '90's? In America, honestly, no. I know that it can, if it has a drastic change of heart about the American marketplace, and it does so very soon. I know that it will more than survive in Europe. It is set to dominate the European marketplace, with infiltration of the East playing an important role, if it doesn't have a change of heart.

An American's View

Every month I will present to you an American's view of the Atari scene in Europe, and it promises to be nearly always optimistic. Below is a partial tally of the new products I saw demonstrated at the aforementioned shows, or became aware of through the Atari press, and next month I guarantee a list at least twice as long.

Deluxe Paint ST will be available from Electronic Arts in September. With a development title of 'Da Vinci,' the program is being coded in the USA with production involvement from EA's UK division.

MegaPaint II is shipping now from Silica Distribution. From Berlin's Tommy Software, the program is designed for painting and manipulating large high-res bit-map images, particularly output from image scanners.

The Radio Service Company (AKA the Atari Workshop) is distributing the German-produced *Tower Power* kits. Any model of ST

can be housed in the boxes, and they come prepared to accept up to three floppy drives and a hard disk. It impressed more people at both shows than any other product demonstrated (I plan on buying one!).

The Troika emulator from Condor Computers provides PC and Mac emulation all in one box. The add-on allows users to simply switch between the ST, PC and Mac environments. There is also a hard drive and multi-sync monitor in the package. It wowed them at the Atari 90's Show, although essentially it was Spectre GCR and PC Speed in one box.

Atari DTP was given a colorful boost with the release of *Calamus SL*, capable of displaying more than 16 million shades in 24-bit color on the Atari TT. The new version includes color separations, simultaneous editing of several documents, and rotation of all types of text and graphics frames.

Print Technik have developed **optical character recognition** (OCR) software that scans musical scores and converts them into MIDI data. The beta test version is still nameless, with no firm release date.

The Complete Works Publishing Company offers all of the plays and poems of **William Shakespeare** on single or double-sided disks. More details in a later issue.

A **weather satellite decoder** is available from Spacetech. It is compatible with all European, Soviet, and US satellite systems, and provides time-lapsed 36 frame animation on a 1040 ST.

Elmtech's **Parsec graphics board** has been upgraded. The new 8768 board offers true 16-bit color (i.e., every pixel on the screen can be any color from a palette of 32,768). Parsec expands your ST resolution to 1024 X 784 pixels.

Hisoft is now shipping *Lattice C version 5*, claimed to be faster and generate tighter code than

Turbo C version 2. The package includes the powerful WIMP Environment Resource Construction Set (WERCS).

GFA Data Media UK was demonstrating (at the Atari 90's Show) the STe enhanced version of **GFA Basic** supporting all 4,096 colors and the extra sound chip.

Creative Computer Design, the team responsible for the *Tempus* text editor, are now shipping **Tempus Word**. *Tempus Word* is not just an extension of the ultra-fast scrolling *Tempus*, but an entirely new program. In addition to supporting large screen monitors, the program includes DTP-style page layout screens, extensive system parameter control, and a host of WYSIWYG features.

FontPrint, available from the ST Club, transforms the most mediocre printer into one capable of quality output. A combination DA/AUTO folder program, it gives any Epson-compatible 9- or 24-pin printer the ability to download fonts, even when the printer normally can't.

At the Atari 90's Show, Signa Publishing Systems was showing **Chili**, a graphics package that provides 256,000 colors on-screen out of a palette of 16 million. Output is divided across two monitors, with tools on one screen and pictures on another. Advanced genlock and animation features are combined to create a package up to broadcast quality.

Signa was also showing a line-up of **networked ST's**, plus a few PC file servers, a STacy to control the Calamus Linotron interface and the Linotron 300 itself. The Bionet 100 Ethernet network could be seen running at full tilt.

Third Coast Technologies was displaying the **GST 40E genlock** and a new 68030 processor upgrade board from Pro-VME. The GST 40E works with STEs without the need for an internal shifter chip

kludge. Pro-VME's 68030 board runs at 25MHz with a 128K instruction and data cache, a socket for a 68882 math co-processor, and a standard 68000 CPU for compatibility. The designers claim that the board will make an ST run twice as fast as a TT. Pro-VME supply a modified version of TOS 1.4 fitted to the board as standard.

Upcoming Shows

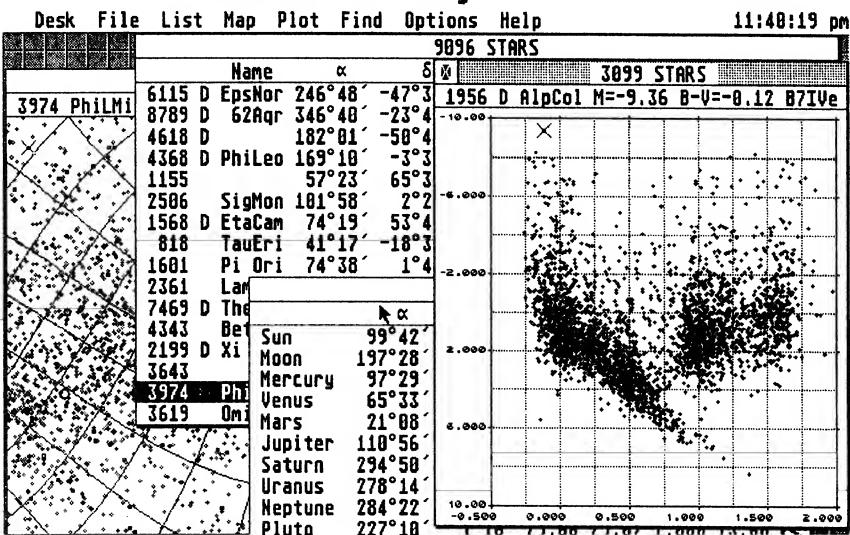
Other diary dates for future promising shows: the European Computer Entertainment Exhibition at Earl's Court 13-16 September; the Computer Shopper Show at the Wembley Exhibition Centre 6-9 December; and the third 16-bit Computer Fair at the Hammersmith Novotel 4-6 January 1991.

30,000 Megas in '89

Finally, not a product announcement, but an interesting aside: Atari Germany's balance sheet grew by 25% in 1989, and 50% in the first quarter of 1990. More than 30,000 Mega 2s and 4s were included in the 1989 sales. Not really surprising, when you consider that over 60 Atari Desktop Publishing Centers grace the streets of German cities.

Next month I'll delve more into games, concentrating on titles that haven't yet crossed the Atlantic. Considering that over 25 new ST games are released here every month, we'll have a lot to talk about!

Star Base. A Sky Full of Stars.



Stars by the Creator. Program by Andrzej Wrotniak.

9096 stars from the Yale Bright Star Catalogue
 * Equatorial, ecliptic, galactic and horizon reference frames * Stereographic, orthographic, Mercator and Aitoff projections * Various degrees of magnification * Find or identify a

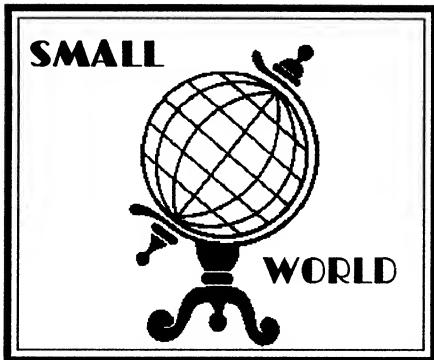
star * Windowed database with select, sort and search capabilities * Hertzsprung-Russel diagram for all or selected stars * Planets, Sun and Moon mapped and listed (precision: 1' of arc) * On-line help

Star Base runs on all ST computers with 1 MByte or more, color, monochrome or MoniTerm (can be also used on a 520ST, but with fewer stars). Price includes one update.

To order, send a check or money order for \$43 (p/h included) to
Debonair Software, P.O.B. 521166, SLC, UT 84152-1166

Outside continental U.S. please add \$5. Utah residents add sales tax.

Our **EI_Cal** is now into its second year of improvements (the current version is 1.2). If you are serious about numerical calculations, you need it (just \$44 ppd.).



[Dave's story this month was quite long, so I decided to break it into two parts. Part 2 will appear in the October issue. -JW]

Judging from my mail and talking to people at computer shows, a fair number of people want to know what it feels like for me to work on a computer, to write a program like *Spectre* or the other ST stuff I've been known to do (*Twister*, *Mega-a-Minute*, etc.) I think probably some are looking for Words of Wisdom that might help them to do something similar.

Well, I haven't got much in the way of Words of Wisdom for that. It happens to me, I don't know why, and I don't know much about how to make it happen for others.

But I've been through the programming project wringer so many times that I can recognize the process from start to end now. And a wringer it is! Let's go through the phases of creating something.

Bump into Doors Stage

In this, the first stage, you Think Of Something To Do and start concentrating on it. Gradually, it occupies more and more of your mind; you begin thinking about it while waiting at stop signs, while on-hold on the phone, while talking to your wife, anytime that your attention isn't needed for the outside world. (Yes! I'm kidding! (Don't tell Sandy!))

Your mind focuses so much on the problem that you begin to bump into walls; hence the name for this stage.

Idling, Part 1

by Dave Small

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Many people call this "absent-minded." It isn't that the mind is absent, it's that the mind is very busy working on something else. (And as any Artificial Intelligence researcher can tell you, a human mind focused on a problem is far more creative and powerful than any computer.)

This situation is very much like running on a multitasking computer, and having something steal away all the spare CPU time. This situation is familiar to anyone who has experienced "multitasking." To see what I mean, take any UNIX box, start up ten "background" tasks, and it'll begin to act like, well, the Bump Into Doors stage. For instance, you'll ask it to do something, and notice you have time to start twiddling your fingers before anything happens. If the computer was walking, well, it would bump into walls because it would not notice them.

Now, sometimes, what you want to do really is unsolvable; the current hardware and software are not up to it. These are maddening; you work through the problem over and over in your mind, you have sixteen bandages on your head, you never reach a solution . . . and the itch never quite goes away. The really bad part is that later (a month, a year . . .) this problem will pop into your mind; it's quietly sitting there still, niggling. Perhaps what people call "senility" is just the accumulation of too darn many unsolvable "background tasks" that the mind is working on.

By the way, if you were reading *Current Notes* back when I wrote about psychological types, the "N" vs. "S" split in the population deals with whether or not you're naturally

more tuned into yourself (inwards looking, intuitive) or the outside world (outwards looking, sensation-sense oriented.) I have never profiled a programmer that was not on the Intuitive side (ever), yet half the population is on the sensation side; the non-programmers I know of, who are "S" personalities, tend to be into things like softball and other sports, where their natural advantage in being hooked into their senses gives them an advantage. Similarly, programmers are basically constructing a mental structure or picture, and have almost no need for senses.

So, you bump into doors as the problem occupies your mind. Well, maybe the problem is unsolvable. However, it's always good not to jump to conclusions quickly and assume something cannot be done; hopefully, you give your mind enough time to really be creative, become saturated and obsessed with the problem, because if you hang in there, you get:

The Blinding Inspiration Stage

This is where you're sitting in the bathtub considering a problem, the solution floods through your very soul, and you run out of the house stark naked shrieking Eureka! (which means, "I have found it!")

(Lest you think I'm kidding, this really happened; someone needing a way to find the volume of any object, and figured out if you immerse it in water, the amount the water rises (is displaced) in the tub is the volume of the object. Simple, but genius.)

It is probably not pleasant being related to someone in the

Eureka! phase, as my wife Sandy will tell you. There are puddles on the floor to worry about, the Denver Police Department bringing me back naked, and the always-annoying towel on the floor.

(Maybe, however, it beats having a husband who walks into walls, mumbles "object oriented music" a lot, and makes sketches on restaurant napkins or place-settings. I'm afraid to ask.)

Time for an example. Let's say you want to double floppy disk I/O speed. The problem is in rotational velocity; the disk is spinning while you're doing things, and that spin is happening with the wrong timing to "step," or move between tracks without losing a complete spin worth of data. That's the "problem identification" stage. The "Eureka" phase is when you figure out you can solve the problem by *postponing time*, as it were; by "twisting" the format of the floppy track three sectors, time is moved back while the disk spins through those sectors. Ping! The floppy can now be accessed at full speed. That's the basis of *Twister*.

Or say you've been thinking about running Mac software on the Atari hardware architecture. Most people never get past snorting "impossible!" Those that do start bumping into walls as they consider the problems presented. Then, there's all sorts of little "Eureka!"s" as you solve the problems.

For instance, the Mac requires memory from \$100 to \$13F for "globals," essential system-wide variables. The Atari requires that space for hardware, for "MFP Interrupt Vectors." (In English, the ST needs the space to find out where to go when you move the mouse, type a key, or otherwise "generate an interrupt"). The solution? A little known command to move the table down to \$C0, out of the way, since the Mac doesn't care what's at \$C0-\$FF.

Mac disks are in GCR (group coded recording) format and are written at varying speeds. ST disks are in MFM (modified frequency modulation or "double density") format and are written at constant speed. The "Eureka!" solution? To read Mac disks on the ST, the read/write circuit has to be able to vary its speed to emulate being on a varying RPM drive.

Mac software often writes, totally by accident, into location 0. This doesn't do anything on a Mac, but because the ST is slightly different (location 0 is "read-only"), any such write will cause a "bus error" (two bombs) and crash the computer. The "Eureka!" solution? (The Motorola manual says there is no solution). So, just write a bus-error handler! Instead of plopping two bombs up on the screen like (say) Atari does and dying, the bus error handler attempts to determine what instruction caused this mess, to intelligently skip it or re-run it differently so as to not cause the problem, and continues. Probably half of Mac software being used on an ST is causing bus errors all the time, and users never know it; only particularly new and irritating ways of storing into zero crash Spectre anymore.

And so on and so on. Lots of "little" problems, lots of Eureka!'s. LOTS of bumping into doors. After nearly five years of Mac Emulation (remember, I started this whole thing in November 1985), my wife calls me "knothead" for a good reason.

Now you can never predict when the Eureka is going to happen, when your subconscious will solve a problem and hand it to your conscious mind. I do know you can stop the process completely by trying to force it; most Eurekas occur when your conscious mind is off drifting, like during a bath, mowing, or whatever. But when it happens, you get The Rush.

The Rush Stage

There is an awesome rush in the "Eureka!" phase that tingles through your whole body. It's impossible to describe well; I can only hint at analogies for it, and then either you'll know it, or you'll wonder at my sanity... but it really is this way.

Go listen to the 1812 Overture; it builds up multiple times through the "bumping into walls" section, kinda fumbles around each time, then finally cuts loose into the "Eureka!" stage, with cannon fire.

Easily the best representation in rock music is on Boston's first album. The song, Long Time, contains this amazing guitar sound that made Boston famous—"clean distortion." See, ordinarily, when you distort a guitar sound, having more than one string of the six vibrating at once sounds *terrible*. One string is fun, two or more is awful.

Now, it's kinda hard to play a song with just one string, but people do it for that distorted sound, because it's so neat. (See: Neil Young: Like a Hurricane, Out Of The Blue, Into The Black as a typical example.)

Boston's distorfer (somehow) fixes that and gives a most awesome sound using all six strings; in fact, the band's leader (Tom Scholz) now markets a device to just do that, the Rockman. I know, I have one. Lots of guitarists like that sound—the Rockman sells well.

If you'll forgive a digression . . .

Sandy takes me to music store for a Christmas. Plugs in a Rockman, plugs in a guitar. Hands it to me. I play a barred "E" chord, and this SOUND comes at me and takes me somewhere wonderful. A minute later, I come back to my senses, idly noticing the goose pimples standing up on my arms, and the tingling running up and down my spine, to see that Sandy's

already making the check out to the music store.

The Rush is worth living for, makes all the bumping into walls worth it. And like anything else, the harder you have to struggle to overcome the problem, the more satisfying it is to solve it. For me, I think I've gotten to like the feeling of setting an impossible problem for myself, then solving it ... pushing the edge of what's possible out a little farther. Personally, I have no idea why these Eureka!'s happen to me and why these solutions come over me. It may well be that God took pity on me, and said, "Let's give him a hundred Eureka's for his life--heaven knows he needs something!"

Or, it may well be a curse--listen, YOU wanna live with things itching at your mind? I still have unsolved ones niggling at me.

For instance. Trisecting an angle (splitting it into three equal angles), an old classic "unsolvable," has nagged at me since I first heard about it, in, oh, fifth grade. I think I've got it boiled down to (essentially) that no matter how many times you bisect (halve) an angle, you don't get a common denominator with a trisection.

And many computer "others," like why can't an IBM use more than 640K . . . I just have an intuitive feeling there is a way that hasn't been thought of yet.

Anywho, The Rush goes through you, fills you up, people notice you've stopped talking and have a very strange light in your eyes, and then you start. . . well. . .

The Babbling Stage

The Babbling Stage occurs right after the Rush stage. It's where you try to explain to a DisBeliever your solution to a problem. Because the mind is under the influence of The Rush, the sentences don't make much sense. Not much processor power is available at that

moment for speech. Often, drawing little squiggly diagrams with incoherent fragments of speech must serve.

Example: "We just format the disk with the tracks twisted to postpone time!"

This does not help a Disbeliever become a Believer. Generally, at this point, people casually, nonchalantly, make sure that there is an exit close by and there are no sharp objects near my hands.

Inevitably there are a few lifted eyebrows and amused expressions that would look great on Mr. Spock ("Really, Doctor, you must learn to govern your emotions!").

Some people never get it. With others, there's an embarrassed reaction as the Rush hits them, and they see what you've been trying to get across. (Of course, the contest then is for them to act unimpressed . . . but sometimes the idea is just too neat for them to be cool about it--for being cool might imply they just don't get it!)

Heaven help you if you're with a non computer person the moment The Babble hits. "But, officer, I just solved the MFP interrupt table conflict problem! Who cares if I'm naked?"

Well, the fun part's over. You've had your Bump, Eureka!, Rush and Babble. Now you have to *implement* it.

Oh, Geeze, This Is Going To Be a LOT of Work Stage

After you've realized it *can* be done, it's time to do it. Yes, the world is full of people who can't get through this stage; they have nice ideas, sometimes try to tell the world about them, and that's it. Programming is peculiar in that you have to *implement* the idea to show what it really is, and that's a long, painstaking process. (No? Compare a description of using a Mac to actually using one--seeing

windows, icons, moving the mouse. Apple's biggest marketing problem is getting people to hands-on the Mac, which sells them; written descriptions don't make it even slightly.)

(Atari: take note of that last sentence. You, too. That's why user groups, shows, and dealers are so vital. Jack Tramiel is reputed to have said something like, "It's important to get at least one machine into a dealer's hands, even at a loss; the dealer needs to touch it, feel it, make love to it, before they'll buy it." Whether or not he did say that, it's true.)

When grinding through implementation, only sheer will power will get you through. There is nothing as agonizing as forcing a computer to your will. Absolutely nothing. (Forcing a wife to do what you want? No, that's completely impossible. Grin!)

When I read fantasy stories of sorcerers summoning demons to perform some task, I can really relate. Computers have evil hearts, essentially--or none at all (it doesn't much matter). What they don't have is the *slightest* concern for what you want them to do, or the *slightest* intention of doing it.

Many people, typically bright young things fresh out of school, have this laughable notion that computers are an exact, precise world, sort of defined with sharp angles, no "greys," much unlike the real world. This is not true, and it's almost painful to watch these people crash (literally) into reality. Truth is, there are SO many unknowns in even a computer system you're extremely familiar with that you're always fumbling with something weird. And many are the times you'll "Crash and Burn" for no determinable reason.

Believe me, the hurt look of disbelief on a fresh programmer's face when the computer genuinely screws up is something sad. It's

when they learn the Tooth Fairy was just Mom and Dad. Santa Claus doesn't exist, and the Easter Bunny candy was bought at the store.

You see--up until that point, they've had it hammered into their heads that if the computer doesn't behave, it is Their Fault. Their program wasn't right. This is true so often that they begin to think it is true always. Whups.

All sorts of weird stuff happens inside computers. There can be bugs in the processor chip (ST's 68000: the MOVE SR,D0 bug that accesses the stack, without telling you). There can be electrical glitches, say, resonant "ringing" of a drive cable. Cosmic rays *literally* (I am not kidding) flip bits inside of memory chips at random; that's a big reason IBM computers and clones have "parity checking," so they at least know to stop when memory has been corrupted. And so on and so on.

Every old programmer I know of, that hasn't burned out and gotten into another, easier profession (say, ditchdigging) treats computers like they were demons. They are untrustful of the computer, keep awesome numbers of backups, use "Defensive Programming," and try to keep Murphy from getting to them. ("Murphy Never Sleeps"). Sure, they get burned by bugs; the difference is whether or not they ultimately give up on computers.

Old programmers tend to collect and collect tools, tools, tools, particularly debuggers. They've learned that often, only one tool can show what went wrong--particularly when it's a computer glitch.

Many people wonder why I'm so down on "high level languages." The reason is experience. So many times I've been trying to track down a bug and can't "see" it because the language is in the way; it's like debugging blindfolded. At that point, you have to abandon pre-

conceived notions of what the computer is SUPPOSED to do, and try to creatively figure out what it's really REALLY.

Of course, this is like any other problem, and is sometimes solved that way, particularly on really hairy bugs. You begin thinking about the bug. It begins to permeate your mind...

(Bump into walls. Eureka. Rush. Babble. Work. See, we're regressing; we haven't even solved this ONE problem yet, and we're doing the steps all over. Computer types call loops like this "recursion"; I define "recursion" as "recurring" because of the words programmers use while trying to debug a recursive process.)

If you're working in a high level language, and the compiler writer doesn't know of the MOVE SR,D0 bug (and who would?)--if you think compiler writers are perfect, you probably believe in the Tooth Fairy, too--then you're out of luck. Your program is going to randomly bombs-away for no discernable reason. Only a heavy-duty single-step of the individual processor instructions, and a traceback of what happened just before the bomb, will reveal the problem.

That means assembly language. That's why I work there. Look, half a programmer's time is spent DEBUGGING. This is why good programmers are always listening to other programmers tell of bugs, and mentally filing away notes. This is also why good programmers haunt the computer networks, looking for solutions, and often ask questions online when they're stuck.

Back to forcing a computer to do your will. Eventually you realize that a 500 line assembly routine must be written to solve your problem. At the point, it's time to grit your teeth, write it, resist the temptation to go Do The Dishes or whatever else, and GET IT DONE.

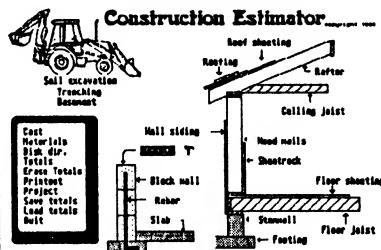
Nothing else will substitute for that work. It's painful and it hurts, but you have to do it; that's the game. It's no different than being confronted with a blank canvas to paint, or a blank page to fill with words. You either create, and get it down where other people can see it humming, or it stays in your mind forever, and what's the point if it just stays in YOUR mind?

And somehow, if you hang in there, and keep trying, your program will one day run to completion if you treat it gently. After awhile, it will handle even abusive treatment, it will check input data, for instance.

Then it's time to let other people see what you've created.

"Idling" continues next month with the four remaining stages: Showing it Off, Selling It, Selling Out, and Burning Out. -JWJ

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The Game of Harmony

Challenging, Intriguing, Frustrating, and Entertaining

Reviewed by Don Elmore

Cool, Stay Cool!

Accolade starts off its description of *The Game of Harmony* by citing Webster's Collegiate Dictionary definition (#3 c) of har-mo-ny as "Internal calm: TRANQUILITY." Then Accolade goes on to say, "Imagine: Soothing music. Liquid sounds. Colorful, pleasing patterns. All part of a game that actually rewards you for staying calm."

Well, with all due respect to Accolade, I certainly would not bandy about terms like false advertising...or, deceptive packaging...but I do have a few unprintable observations about the "staying calm" part. Oh, I have no doubt that by remaining calm I might achieve higher game scores. But, I liken that to the Catch 22 situation where my physician assures me that he'll get a much better blood pressure reading if I were to relax more...as he approaches me with the horse cuff and stethoscope. At any rate, Accolade further describes *The Game of Harmony/Harmony* as a game that is more like meditation, and if *Harmony* is indeed anything like meditation, then give me the good old stressful cutting edge of society any time!

But, enough of my blithering about Accolade's description of *Harmony*. How do I describe *Harmony*? Challenging for openers. Intriguing, too. Definitely frustrating at times, and (above all) very entertaining.

Simplicity Itself

As described in the manual, the game is simplicity itself. Simply

bang little balls into each other and rake in the points. You are presented with a variety of colored spheres and you control a special one called the Seeker. By using the Seeker much as you would a cue ball on the pool table, you cause one of the colored spheres to strike another sphere of the same color (green to green, brown to brown, etc). When you have brought about this most impressive collision, the two spheres disappear and you are awarded points.

But There Is a Catch

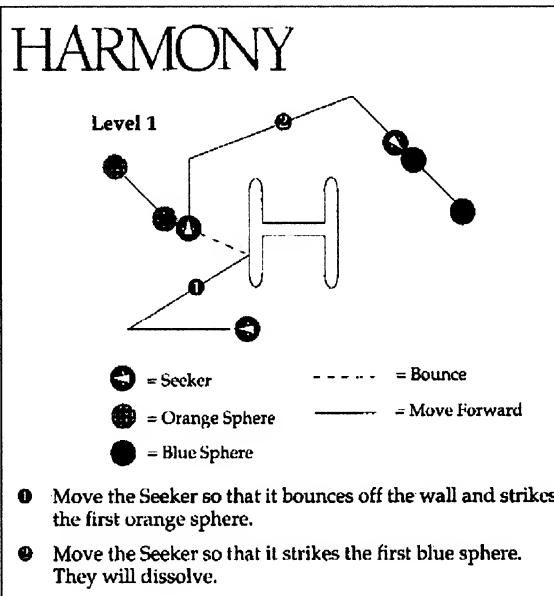
Simple, you say? Ah, but consider the hook. As those spheres appear, they are gently pulsating

So, how does one control (move) the Seeker? Well, the Seeker sphere has a triangle on it with two dots, one on each side of one of the apexes of the triangle. They look like little eyes, and since the Seeker moves in the direction of that particular apex, as far as I am concerned, they are eyes! Using the joystick, you can move the "triangle" in any direction, 360 degrees. I call the triangle the clicker-clacker because that is the noise that it makes. Point it in the general direction that you want the sphere to move and hit the fire button to send the Seeker in that direction.

You are not limited to the confines of the screen. Aim the clicker-clacker at the bottom of the screen, push the fire button, and the Seeker will move off in a straight line, right off the screen, and enter the screen again, on the same "line" at the top of the screen.

And It Gets Harder

Still sound simple? Well, here's hook #2. Some (and at the higher levels, more often than not) of the spheres are connected by itsy-bitsy bungee cords. Notice, I said spheres, not spheres of the same color! So, with one (or more) pair(s) of spheres connected by the elastic cords, there is a whole new dimension added to each screen. Vectors and/or trajectories must now include some good old "Kentucky windage" to compensate for dragging one (or more) spheres around. Let us not forget hook #3. The Seeker can also be tied to a sphere, or in the two player game, to the other Seeker.



and if you cannot get them to collide with each other, they continue vibrating more and more, and eventually explode (probably from pent up frustration of their own). If they all explode, then you are automatically moved on to the next level of challenge.

Believe me, there is a whole lot of shaking going on. Another integral game configuration is the different varieties of barriers or walls. Each screen has one or more of the barriers, in shapes ranging from a simple line across the screen dividing it in half, to literally, mini-mazes to be transited.

So, not only do we have to cause similarly colored spheres to collide with each other, we must do it while some spheres are tied to other spheres, or to SeekerS, and we must maneuver spheres and SeekerS around barriers, AND do all of the above before each sphere's pulse time limit is reached. Spheres explode anywhere from 10 to 30 seconds after they appear. And, it can take me over 30 seconds to get the silly little clicker-clacker facing in the direction I want. How's that for internal calm and tranquility?

And, the pods. Don't forget the pods. Each time you bang different colored spheres into each other, they will generate a small pod of yet a different color. You have all of three seconds to gobble up the little pod with the Seeker, and gain energy. If you aren't fast enough, the pod will grow into a full blown sphere for your consideration . . . until they begin to pulsate.

Actually, Accolade must have been thinking of the undersigned when designing the game, because they have provided a much less demanding avenue in *Harmony*. Accolade calls it the Mantra mode. As stated, other games would call it the practice mode. Accolade describes the Mantra mode as having no time limits (read no pulsating), no restrictions and full access to all 50 levels.

Elegant Solutions

The manual urges you to work through all of the configurations, find the unique problems and the "elegant" solutions. Elegance isn't

too high on my personal agenda. I will be satisfied if I can bang my way through. I have made it to level 23 in the normal play mode, and will, hopefully, eventually reach 50. My son and I have tried the two-player mode and that is interesting...when you have a screen full of spheres, a random sampling of pods, various bungee cords connecting virtually anything, and rather complex barriers to circum-

vent. . .believe me, it is anything BUT tranquil! Bottom line? Well, this interesting little arcade game will keep you entertained for quite a while. I recommend adding it to your collection. Like the manual closes. . . "Happy harmonizing!"

Harmony, \$49.95, Accolade, 550 South Winchester Blvd., Suite 200, San Jose, CA 95128, Tele: 408-985-1700, 1

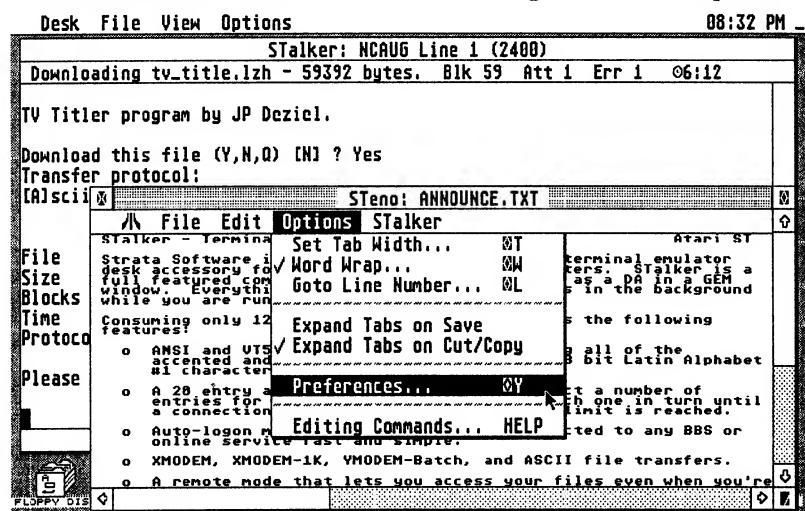
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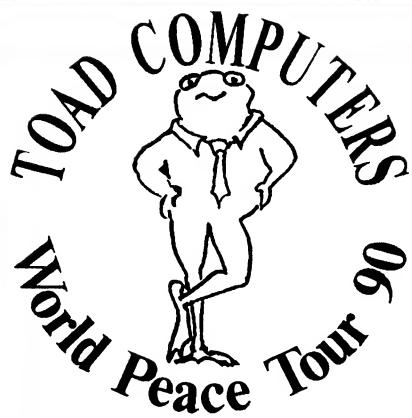
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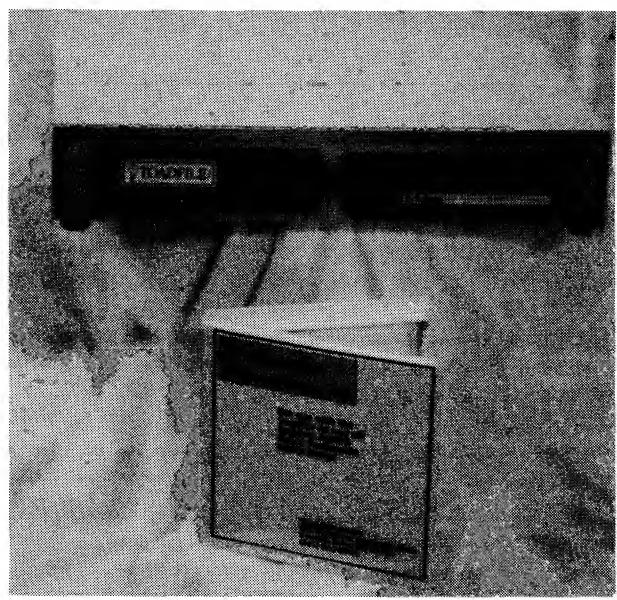
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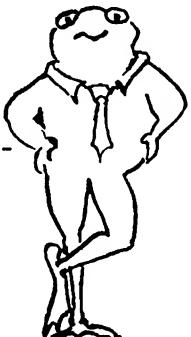
- Frank Sommers, Current Notes

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And Then There Were Mice

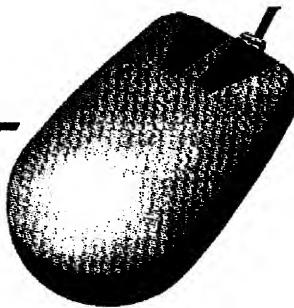
Best Mouse, GoldenIMAGE, and Tripletrack

Review by Frank Sommers

IBM users are "rolling all over" themselves with the joy of having discovered a graphic interface for their computers that allows them to drive the ghost of MS-DOS from their homes forever. Yes, Windows for the IBM is big news. For a brief electric moment Atarians can tilt their noses slightly and smile, warm

of the Atari mouse, giving you more distance per roll, and though you couldn't document it, it felt smoother. By George, it had to be smoother. No question, the name was right on the mark. The Best Mouse was best.

THE BEST MOUSE



with the thought that they've had such an interface for over half a decade. In fact, they've had it so long, the magic now is to find the gentlest, fastest, softest, smoothest, sharpest, fit-in-your-palm mouse with which to drive the interface.

Quick to sense the need, companies have introduced three devices, all of which represent an improvement over the stalwart original Atari creature. Though it maddened you when you had to clean it and pick the lint out of the crevices and scrape it, somehow, off the minuscule little rollers, so that your arrow or cursor would dance around the screen for you, once again, the Atari mouse did the job and was surprisingly durable. When Atari borrowed some of Reagan's teflon, (while he was out galloping his favorite horse, "Deficit"), and then put the teflon on the mouse rollers, even the cleaning problem almost disappeared. So why did we need something new to which we could divert the better part of \$50 from our savings? Because time, ease, and smoothness are at the top of the list of ST-user demands. It has to run faster, smoother, and with minimum effort.

Enter Best Electronics

And then there was the "Best Mouse." Why the little sucker would arch its back and tuck up into your palm like it was home. There was no sharp roof effect and the click was a click, not a jab or a stab or punch, as it had been on the old mouse. The well for the control ball had three coated rollers about half the size

Innovate, Oh, Innovate!

Some rocket scientist must have diverted his attention from his job and focused briefly on "a better mouse." His high IQ immediately told him to take the roll out of the mouse and he'd have a device that would fill every house, at least those that had ST's or Mac's. So how do you take the roll out, how do you have a mouse that doesn't move. Simple. Invert the ball. Instead of having the little gray round heavy lump underneath on the belly of the mouse, why with a little surgery you can hump the mouse, have the ball on the top, about the size of a palm and rollable inside its tight little well. No fuzz, no fuss, nothing to clean, and the stationary ball and holder take up only half the space. So the trackball mouse was born. Users scoffed at anybody who hadn't switched over and saved those sixteen-square inches of always hard-to-come-by

TripleTrak by Kraft

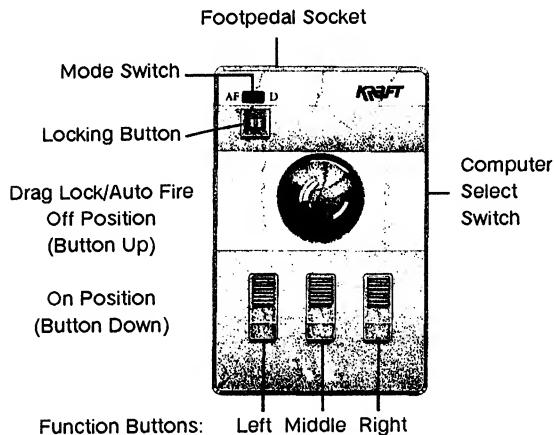


space on your already-crowded computer desk. But if you were to have a trackball, why not throw in a joy stick too. This novel, innovative, and quite creative idea came, obviously, from a bright colleague of the rocket scientist, who may also have made mirrors for overhead cameras and telescopes.

What do you mean, joy stick too? On the same cable, or what?

Enter Kraft Systems

Some of you original Atari 800 & Atari 1200XL & Atari 130XL users will remember the Kraft joy stick. Possibly the best of all the joy sticks of standard



design, it had a slightly smaller stick and compact housing, and seemed more sensitive to your needs, e.g. like blasting everything in *Missile Command*. Well, the same company has come up with "Tripletrack," the combination trackball and joy stick, which functions without adapters. Merely plug it into the mouse port, throw the switch on the right side to "1" and start to roll, and we mean roll. Its action is faster than the Best Mouse, just by virtue of the trackball effect. On a Moniterm large screen it roars across from one side to the other, yet in *TouchUp* it is possibly more sensitive to drawing requirements than a standard mouse. If you are using it in a word processor like *WordPerfect* it has a lock feature, in the upper left, that when activated puts the cursor in drag status and allows you to block out any portion of text with but a mere roll of the ball. There are three buttons below the ball. The two outside ones are the same and allow you to position the trackball on the left or right of your keyboard, depending on your dexterity. The center button is the same as the second button on a mouse. After a few minutes of use, you suddenly understand why your friends with trackballs turned their back on you when you scoffed at their needing to switch to same.

And as a joy stick? Well, here the word is not quite as bellissimo. It is easy enough to

convert from mouse to joy stick. Simply plug it into the joy stick port and move the switch on the right side of the device to "3." You now have a joy stick with the ball, and a fire button in either of the outer two buttons, with a fast fire capability on the upper left. Performance? We took it into two of the "toughest" environments for a joystick, where accuracy and speed are critical. First, *Tetrys*, the falling block game, where we could gradually adjust to it, but found its speed didn't equal that of a regular joystick or at least we weren't able to to get it to perform as such. Then we tried it in *Harmony* or *EZ-Motion*, as it's called in Europe, where your sense of space and direction are quite alien, and even with a joystick you experience considerable frustration in getting the object on the screen to perform as desired (part of the game's addiction). Here we found it difficult to adjust to. Thus, in sum, as a trackball it is a high quality device with a 28 sq. inch footprint and plenty of speed and smoothness. As a joystick . . . there are better available. But none with a five-year warranty, which Kraft is unique in offering, plus the best looking silver-gray trackball cover extent.

Enter Jin Tech Electronics

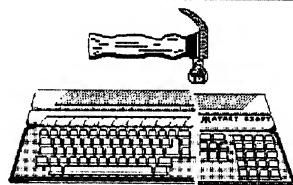
Out of the east, comes a little lovely that will quickly win your heart as well as your hand. The GoldenIMAGE mouse can be described as the finest mouse out there, because, simply put, it is. Its snuggeness in the palm is not better than the Best Mouse, but there the "not betters" cease. It is smoother, it is quicker, it is almost silent with the faintest "tick" as you click the buttons. Designed so that it has a built in mouse accelerator, for those of you who have been using accessories to accomplish this and cursing when a particular program won't accept the accessory, the cursing, but not the quickness is over. GoldenIMAGE is the stealth bomber of the mouse world. You hardly know it's there as you sweep around the screen, silently wrecking havoc with your cursor.

Best Mouse, \$49.95, Best Electronics, 2021 The Alameda Suite 2990, San Jose, CA 95126; 408-243-6950.

TripleTrack, \$79.95, Kraft Systems, Inc., 450 W. California Ave., Vista, CA 92083, 619-724-7146.

GoldenIMAGE, \$39.95, L&Y Electronics, 13644C Jefferson Davis Hwy., Woodbridge, VA 22191, 703-643-1729.





Such Things Don't Happen to Nice People

What to Do If You Got a Virus ???

As you may know, in my free time (what is left after slaving 40 hours a week as the most underpaid employee of a Beltway Bandit company) I also write Atari ST programs, trying to sell a copy a week or so through my partner from Debonair Software in Utah. Well, writing math and astronomy software for our favorite machine is not where the money is, but it is a nice personal experience with all those people writing you letters concerning your programs and hundreds of other topics.

Just last week Mr. Curtis Schweitzer from North Dakota sent us an alarming letter: a virus had been discovered on our *Star Base* distribution disk! After a lengthy phone conference with my partner 2000 miles away (AT&T will soon start sending me roses!), we decided that she would stop shipping for a few days, while I investigated the problem. And here we come to the first principle of dealing with a virus: ***Do not panic!***

Obviously, we have been living with the critter for at least a month, maybe longer. Whatever harm could be done, is done. But so far, we have not noticed anything wrong in our systems. Maybe the virus is a harmless kind, maybe our customer mistook the PC-DOS boot sector for a virus. Let us get a cup of black aromatic coffee, boot the computer (virus or not) and investigate. First of all, do not panic.

Let me admit: my hands-on experience with computer viruses is nil. I have never seen one: "those things do not happen to nice people." I cannot tell a FAT sector from a boot vector, and I do not do

(among other things) 68000 machine language. Luckily, I know of someone who has got all that I am missing.

Enter Mr. George R. Woodside from California, the author of the highly acclaimed *Virus Killer* program. I have seen his VKILLER.PRG on GENie and Compuserve, and I have heard many good things about it, but I have never bothered to get myself a copy. Well, this may be just the right time.

Through a brief search through the utility download area on GENie, I discover that the most recent available version of *Virus Killer* is 3.11, uploaded last February. There is also *Hospital*, a set of anti-virus utilities, written by Mr. Neil Forsyth from Great Britain. And finally, a program known as *Super Virus Killer* (or VKILL.PRG), from MUG UK is also available in the public domain.

Before going into any details of these programs, let us have a short, and somewhat simplified, refresher course—Virology 101.

What Is a Computer Virus?

A virus is a computer program that will spread (i.e. make additional copies of itself on your disks) by itself, without any help from you. Usually, you are not even aware that the virus is active in your system until it is too late, that is, until the virus starts doing something other than just multiplying itself.

The simplest kind is a **boot sector virus**. As you may already know, the first sector on a floppy is devoted to system purposes. It may contain a very brief program (not shown in the directory!) that the system will execute when booting

up immediately after your computer is powered on, even before the auto folder programs run, and before GEM is installed.

On the Atari ST, the boot sector is usually left almost empty. The more recent versions of TOS (1.4 and 1.6) format disks with the so-called PC-DOS boot sector, required by IBM PCs and clones to be able to access our disks. The ST does not use this information.

An ST game disk may have a boot sector with a simple program which does just one thing: executes the game itself from the disk file. This is how many auto-running games work.

If the boot sector of the floppy you have in drive A contains a virus--whether you boot up from a floppy or a hard drive does not matter--the virus does, at first, just one thing: installs itself in memory. It can be there as a background program, self-contained and watching what is going on, or it can replace one of the system routines, usually a disk access function. The second approach is, I believe, more common.

For example, when the program you are running, or the GEM desktop, needs to read the disk directory, an instruction to "go to a routine whose address is at location so-and-so in memory" is executed. In other words, it looks to "so-and-so" to find the vector pointing to where the directory-accessing code is stored.

Upon bootup, many viruses modify this vector so that it points to the virus-installed code. The latter does whatever it was program-

med to, and then executes the routine your program was asking for, so you don't notice any difference. Thus, each time you execute an innocent disk-access routine, you really wake up the virus!

Remember, the main activity of a virus is spreading itself. Therefore, its actions always include copying itself into boot sectors of any accessed disks. Anything else is secondary, and varies from breed to breed.

Known Viruses on the ST. As far as I know, all viruses presently identified on the Atari ST belong to the boot sector class. They are also quite benign: the only real harm they do is spread themselves by overwriting the boot sectors of any floppies they can access.

For most purposes this is pretty harmless, as the boot sector is usually ignored by our machine. You can be hurt only by trying to access an auto-run game disk while the virus is in memory: the auto-executing boot sector on your game disk is replaced with the virus itself. This is not a common case, however, as usually you load the game disk with the computer off and boot directly from it. Remember, a virus cannot survive a cold reset of your computer!

The most common ST virus is known as the Key, Type 1, or the Signum virus. It does nothing but spread itself, unless it encounters a special "key" disk. Then, the virus will execute a program from that "key" disk, whatever it is. I was not able to find any reports of identified key disks.

The other recognized viruses on the ST (about 10 in all, with some sub-strains) are mostly just pranks. Some of them may, after some time in the system, invert the mouse movements (you move the mouse up, and the pointer on screen goes down), some do more or less funny things to your screen, and some include sound effects. One slows your machine down until

you have to reboot, and another slowly eats the top and bottom of the screen, one scan line at a time.

A British virus, known as Antivirus, gives a brief message upon boot-up and then spreads itself, but only to disks whose boot sectors are empty. It will not mess up your game (or any other) disks. The Antivirus also beeps and blinks the screen if it detects a disk with an executable boot sector (other than another copy of itself, that is).

Yet to Come. With time we may see the arrival of uglier, more harmful virus strains on the ST. As I mentioned before, the viruses reported so far are, more or less, harmless pranks (although writing to other people's disks without their permission is certainly not right).

There were no reports of any ST viruses attacking hard disk drives. The programmer who wants to impress the world by releasing such a virus deserves to have his kneecaps broken by the *Current Notes* writers' board (our average is close to 300 pounds per person!), and then be banished to the PC-clone world for the rest of his miserable days.

There is another virus family, known as **link viruses**, that do not live in boot sectors. Instead, they attach themselves to other programs. They are, it seems, more difficult to write, and they can not

be detected just by checking the boot sector of a suspected disk. Finally, a hybrid version is also possible: a virus, originally attached to a program, that writes a boot-sector virus on a disk.

Again, as of this writing there were no reports of link-type viruses on the ST. (There were some in the PC world, and quite nasty, wiping out the data on hard drives!)

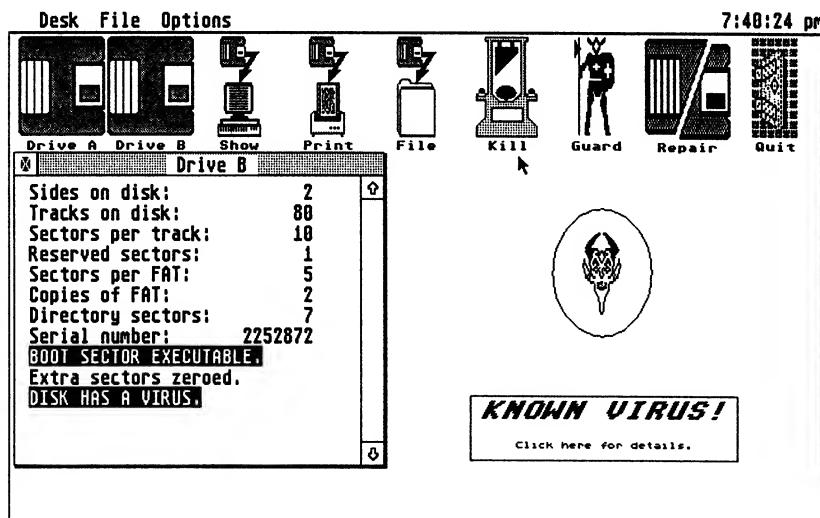
Now that we know what all this is about, let us go back to the anti-virus utility programs.

The Virus Killer. The *Virus Killer* looks good, works fine and is easy to use. You really do not need to have any technical knowledge. Everything is explained clearly on the screen in plain English.

The program comes with a brief document file, reading of which is not even necessary, at least not for using the basic functions.

Run VKILLER.PRG and click on a drive icon on the main screen. *Virus Killer* checks the disk for the virus and lets you kill the bugger by clicking on another icon, or even install a virus guard on your boot sector. It would be difficult to come up with something easier to use.

When *Virus Killer* detects a virus it knows, it also allows you to view a brief description, again in very understandable terms. If it detects something that could be a virus of a



new kind, it lets you know as well, and you can sterilize the disk, too (send a copy to Mr. Woodside, do us all a favor!).

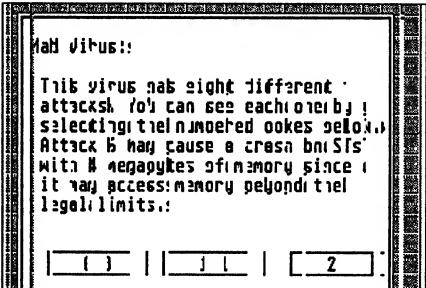
The virus guard is written on the boot sector of a floppy. When the computer is booted up (from a floppy or hard drive, as long as the guard disk is in drive A), you see a brief message, and the guard installs itself in memory. It checks the boot sector of any floppy accessed by your computer, and if anything suspicious is detected, the guard beeps and flashes the screen. You may then have to examine the suspect with *Virus Killer*.

For those who like to be more technical, *Virus Killer* provides some other options, like listing the virus code (or for that matter, any sector on the disk), repairing a boot sector, or copying a suspected virus into a disk file for further analysis (do not be afraid to do it—it is safe, there is no way such a file could autoexecute itself!). Remember: *Virus Killer* handles only the boot sector viruses, but that is all we need—for the time being, at least.

I really feel much better, knowing that Mr. Woodside is fighting this war on our side. His program is competent and easy to use, my personal favorite among the anti-virus tools, and deserves the highest recommendation.

A companion program of Mr. Woodside, *Flu*, is a nice demonstration of how various viruses may show on your computer. It does not install them on your machine, just shows you the results (see picture).

The British Rescue. The two British entries mentioned before are also good tools. The *Hospital* con-



sists of eight programs, most of them to be used from the AUTO folder. They are not as easy to use as the *Virus Killer*, but some of the options they provide are unique.

For example, one of the *Hospital* programs, *Acid Test*, will even check whether some of the system vectors have been modified, which gives you some degree of protection from link viruses, if and when they arrive. Another one gives you the ability to check your boot sector against its copy stored in a file.

The *Super Virus Killer* from MUG UK recognizes boot sectors of many popular games and will not flag them as possible viruses. It also allows you to install a variety of nice color effects on your boot sector, which gives you some measure of protection: if you do not see the effects upon boot-up, your boot sector has been altered, possibly infected! You can even use this program to infect a disk with the Antivirus strain (but I would rather not do it, using the Virus Guard from Mr. Woodside's program instead).

Go Nuke 'em, Sonny! Back to my own story: using the *Virus Killer* I checked about 250 floppies from my collection. More than 100 were contaminated with the Signum virus. The process of checking and sterilizing the disks is very fast, as the program has keyboard equivalents for the icon options. With two floppy drives, you wipe the vermin out as fast as you can swap the disks, one every five seconds or less. Oh, well, no harm done—and the virus must have been in my library since January, if not earlier!

Just out of curiosity, I have checked about twenty original program distribution disks from various companies. Surprise: six of them had the Signum virus!!! Now, for many years I have adhered to a very strict procedure: the first thing I do with a program distribution disk is write-protect it and make a backup copy. The original stays

always protected. This can mean only one thing: all these disks arrived already infected. I must have accidentally booted up with one of them, or a copy, in the A-drive (remember: the boot sector is executed even if you boot up from the hard disk), and there goes the neighborhood!

So What Do You Do? So what should you do if you think you have a virus in your disk library? Yes, of course, first of all, *do not panic*. Remember, the ST viruses are not very harmful, being a result of somebody's irresponsibility rather than ill will.

Get a copy of Mr. Woodside's *Virus Killer* (or even better all the programs I have mentioned above, our Editor has put them on a *Current Notes* library disk #490), find a couple hours of quiet time, get yourself a cup of espresso (or a Guinness, or celery juice) and start the hunt.

To be absolutely safe, boot up without any disk in drive A. This way there will be no chance for the virus to get into your computer's memory. Then load the disk with *Virus Killer* and run the program. Keep checking all your disks—this goes really very fast. Identify the disks you may be booting from and install the virus guard on them.

If you use a floppy-based installation, it makes sense to have just one boot disk (with a backup, of course) with all the desktop accessories and auto programs. If you boot from a hard drive, any disk with the guard installed will do as a placeholder in drive A. Now you will know if anything tries to penetrate your defences (this was, by the way, how the owner of *Star Base* detected the virus just after loading the infected disk into his computer).

Many thanks to Mr. Woodside, Mr. Forsyth and MUG UK. Thanks also to Mr. Schweitzer who, unwillingly, provoked this article. And happy hunting, everyone!

Ahe preliminary report tells of an aquanaut group exploring mysterious and unexplained happenings around Shark Reef, about 300 miles off the coast of West Africa. A squad was sent down, the finest aquanauts around. Only one returns alive, but he makes it only long enough to tell of great dangers and what appears to be an alien ship partially submerged.

You Oughta Be Here with Me. *Aquanaut*, a recent release for the ST, is an action game featuring colorfully animated graphics and a three-stage challenge.

The first step, an encounter with various dangerous life-forms at Shark Reef, must be conquered. Jellyfish, swordfish, and sharks swim ready to attack. Fire away. An alien craft must be located and a plasma bomb needs to be planted. Only seconds to escape the blast.

The Labyrinth, the second stage of the game, offers encounters with the aliens, deadly enemies. It's a search requiring quick thought and action.

In the underground city still more beings defend. Mermen, merangels, and hatchlings hide the information necessary for success. And then there's the master alien and the final battle.

The game follows the standard format of offering new dangers, surprises, and rewards along the way. Points are scored and helpful aids are obtained by blasting certain creatures and objects. The usual rule ("Try everything!") should work.

Muddy Water. *Aquanaut* comes on three double-sided disks. Each disk contains one section of the battle to be faced. The disks are copy-protected. Also, a depth reading taken from a supplied map must be entered when beginning the game. The ocean map is printed in black on a very dark brown background.

The documentation, in addition to the 14" X 18" map, includes a 24-page booklet written in the form of a report of known information. The booklet gives background to the game, incorporating hints, helpful in solving some of the difficulties to be faced.

The animation is colorful and includes both color-cycling and frame-flipping. The music and sound effects seem appropriate and help set the mood for the game.

The game will run on a 520/1040 ST with 512K. It requires a double-sided drive and a color monitor.

Waitin' for the Light to Shine. While it has its virtues, *Aquanaut*, unfortunately, doesn't really offer

Aquanaut

An action game . . . face deadly creatures . . . track through the labyrinth . . . deal with an alien master.



Review by Bill Moes

any great style of its own. The scenario doesn't greatly differ from many other computer games around.

The game is linear; the first section must be completed before going to the next. The Shark Reef section was as far as I got. There are no levels for players of different abilities. It's not a particularly easy game and that, coupled with the game's lack of originality, brought on the boredom.

Although the graphics and sound effects are fine, they probably won't strike anyone as outstanding. Attempts at humor come across as juvenile ("Stung to death by a jellyfish right in the tentacles."). And the copy-protection would have to be another negative.

On the positive side, the joystick-driven game does have reasonably smooth play. In addition, the variety of challenges would make for a more interesting experience.

So, while *Aquanaut* has a solid presentation with three double-sided disks and some minimal documentation aiding gameplay, it lacks the fire and light that distinguish the truly worthwhile games.

The Boys. *Aquanaut* (\$39.95) is an action game taking the player through the ocean to an alien craft. It features colorfully animated images and appropriate sound/music effects.

Based on the humor offered and the game's theme, *Aquanaut* seems aimed at an audience of young boys. Unfortunately, it lacks originality and flair and must be considered just one more of those "me-too" games, all too common.

[Miles Computing, 5115 Douglas Fir Road, Suite 1, Calabasas, CA 91302 (818-340-6300). distributor: Electronic Arts, 1810 Gateway Drive, San Mateo, CA 94404 (800-245-4525)]

Is This the Manual or a Decoy?

By Pat Raymore

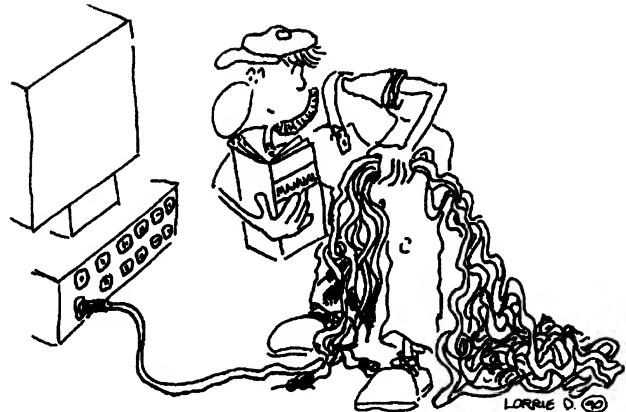
Have you ever opened a box of software only to find the manual contained within was a decoy? As with any good decoy it looked like a manual, smelled like a manual, and even had the word "manual" printed on the front cover. Every time this happens to me I get up on my soap box, nostril flaring, breathing fire. Just the word manual brings me to my feet. Let me assure you, manuals can be a user's friend or an instrument of torture. I am not saying that manuals are particularly easy to write. On the contrary, a good manual is



tough to write. Manuals should be an integral part of the program (or product). Often it is obvious that many manuals were written after the heat of a programming battle with little understanding of how the user goes about using it - an afterthought. The last thing in order to get the product to market. One thing a manual maker should understand is that his/her manual will fall into the hands of a great many beginners and novices. How many depends on the type of product. Obviously, word processors are among the first programs beginners buy. Regardless, it is always pleasant to encounter a little "I am stupid" section showing how to use a computer right up front. How extensive this section is depends on who you expect the user to be. I know people where it wouldn't hurt to have this section be half the manual.

When people buy a piece of software, assume that they needed it yesterday. Actually, they probably needed it a week ago. So what you're dealing with as a manual maker is an impatient user who wants production now! No, yesterday. What he needs is a special section that runs him through the salient features of the software. Forget the details. Just show him the essentials. Details later.

Many assume users all go to the index in order to find the location of a specific piece of information. Are you kidding?! No way! That would be too logical. Users go digging for the information where we thought we saw it



last. So forget the wonderfully logical index as the first order of business. What is really needed should be called the "external index." It comes in the form of indexed tabs on the edges of the pages. It could be tabs, color coded pages, or even physical dividers. Even a bold well demarcated table of contents is better than an extensive index. Let's face it. Most users go to the index when desperate, meaning all else has failed. Now I can go on and on (believe me) but that is hardly the object of this article. This is not Class 101 "the art of manual writing."

Fact is, few of us write manuals. So why am I foaming at the mouth? Well, if you think that manuals are perfect and this world can't be made better, then stop (go to jail, do not pass go, do not collect \$200). But if you do think that manuals can be made better then stop mumbling under your breath. The next time you come upon a despicable manual just don't sit there exercising your eye balls and shaking your head in disapproval. Write them. We are talking constructive criticism here. If you don't write they just sit there thinking that they have created the best thing since the invention of the banana. Tell them otherwise. Be specific. Don't expect an answer. They are usually not thrilled to get advice from the peanut gallery. But you can be sure that it does register. The next occasion that they have to write a manual they will think about what you have said.

Same tune second verse. What applies to manuals applies to software and hardware. Atari and its developers are not clairvoyant. If you sit there with your tongue firmly between your teeth and pen in pocket, they will give you what they think you need. Say something!



Pipe Dream

A Bit of Good Fun

Review by Sam M. Van Wyck

No More Slash and Burn.

Are you tired of bashing dragons; being bashed by villains, orcs and assorted *ninja* or just weary of the eternal quest? Have you finally reached the point where the cry of yet another princess demanding rescue results in a bored yawn and a call to the local Rescue Squad? Is your house companion threatening to throw your collection of shards, crystals, scrolls and assorted treasure into the recycling bin? Face it, Bunky, maybe it's getting about time to quit the game and look for something a bit more sedate than adventuring. Even Derek the Daring has to hang up the sword sooner or later. Let's check the ads in the weekend Sun; they always have a lot of jobs open. How about something that pays well, offers a challenge but still lets you go home every evening without having been maimed? How about this one...

Master Plumber. Can you think under pressure? Acme Chemical requires a Master Plumber in their new plant. Must be able to construct pipelines quickly and accurately, make independent decisions while working alone or with a helper. Salary commensurate with experience.

Sounds like a piece of the old cake, doesn't it? And you know plumbers make good money. Go for it, Bunky! Don't let this one get away.

Pipe Dream-The Game

The idea behind *Pipe Dream* is certainly not new. There were at least two games from the eight-bit

days that had the interconnection of pipes under trying circumstances as their central theme. The basic concept combines these with a touch of *Tetris* in that the pipe sections available to you appear in random order and you have to use them as they appear.

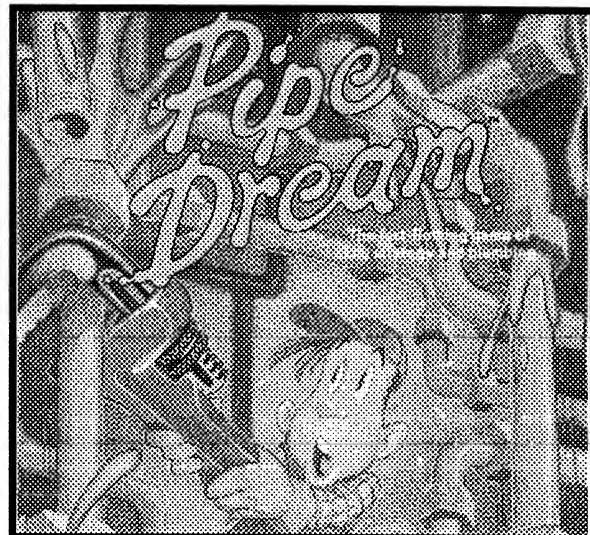
Acme chemical manufactures *Flooz*, an industrial strength sewer cleaner. Once the plant begins cranking the stuff out, it must be connected via pipe to wherever it needs to go.

Enter Plumber; Stage Left, with Fanfare

OK, Bunky, it's your first day on the job. Get with it! *Pipe Dream* comes on an unprotected disk allowing it to be installed on your hard drive. Piracy protection is via a code wheel which must be consulted each time you boot. A reference card serves to cover the Atari-specific commands and features. The instruction book is above average, although lacking in several important details which must be learned the hard way - by surprise; the same way you had to learn about the Meat Weevil's trap in *Bard's Dilemma*.

The Executive Key

Play is by keyboard, joystick or mouse and all three are effective. Choice is made from a menu which also allows selection of difficulty. After each game, the menu is offered in case the player wishes to



make any changes--a thoughtful touch. Play begins on Trainer level. After achieving a satisfactory quality of work (and high score), a password appears allowing access to the Basic or Expert realms. It's sort of like getting your key to the executive latrine.

The game is played on a 10x7 square field. On the left is a vertical rack of pipe and coupling pieces (two racks at Expert level); on the right, a vertical bar indicating time remaining before the *Flooz* begins flowing. A pipe stub marked *source* is where the action begins. Your task is to select pieces of pipe from the rack and connect them to the source to form the longest possible run. After a brief interval, the *Flooz* begins flowing. The length of time before the flow begins and its speed through the pipes depends upon the level chosen.

None of this would be very challenging if it weren't for two small problems. First, while you can see five pipe sections at once, you can only take the piece of pipe that is at the end of the feed rack. In Trainer mode, there are seven varieties of pipe: four right angles, two straights and a crosspiece. The higher levels add more. They arrive at the delivery end in random order and may not be rotated. A vertical straight will not substitute for a needed horizontal connector. If the

piece at hand isn't what you want, you have to dump it somewhere on the field while the next drops into the hopper. Placement of the unwanted sections constitutes one of the major challenges of the game.

Eventually the needed piece is available and you position it by clicking on the destination square. In this manner, a continuous network of pipe is built. Each connected section gains point credit when the *Flooz* flows. To stay in the game and advance, you must connect a minimum number of sections.

The second problem lies in the fact that any stray pieces which are not part of the *Flooz* flow are charged against your score at the end and, most important, do not count toward the requisite number

of connections needed to stay in the game. Thus, if the next pipe section required is the fourth in the feed rack, three pieces have to go somewhere. The challenge is to build two or more networks, one tied to the source spout, another made up of the unwanted pieces and then manage to interconnect them before the *Flooz* overflows.

Scoring and Promotions

There are enough variations and bonuses to keep the scoring interesting. For instance, flow through a single section might gain 50, 100, 500 or 1,000 points and these may double under certain circumstances. In addition to points, one must interconnect a minimum number of pieces simply to stay in the game at a given level. Trainer mode requires ten connections initially but advances to fourteen and above with each new screen. High scores may be saved to disk although the ability to do this seemed spotty and inconsis-

tent. No provision is made for saving a game.

Getting ahead in the hero business is difficult and so it is with plumbing. Upper level screens contain obstacles to be avoided as well as "goodies" such as reservoirs that slow the flow, bonus pipes and terminations. All combine to provide a most entertaining challenge.

Should you find the game to your liking, you may still feel that one or two modifications would improve it. If you fail to enter the correct security code, you are not informed of the fact until after playing the first screen, probably to allow the game to be demo'd. It's an annoyance, though, to be forced to stop play and reboot to get back to the front door. Also,

it would be nice if a provision existed to exit the game without having to reboot.

Two player competition/cooperation is also possible. This feature might make it a most suitable choice for the rugrats in your life as it teaches the principles of simultaneous cooperation and competition. Perhaps best of all, there is no killing, bashing, zapping or violence of any kind. Even the Master Plumber has no lives to lose. Failure is punished by a simple "GAME OVER." Restarts in any mode are quick and easy. Access to the higher levels is by password so it isn't necessary to replay the introductory boards in order to return to the point where you "bombed."

PIPE DREAM is a lighthearted, non-violent bit of good fun. There is enough action and strategy in it to make it attractive to all ages.

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STALKING THE F-19 STEALTH FIGHTER

Cruise Control Aerial Attack

Review by Mike Heininger



Time to Enjoy Battle

Flying the *F-19 Stealth Fighter*, the long-awaited Atari version of Microprose's latest flight simulation classic, is like aerial warfare on cruise control--once you take off (reasonably easy), just tap 7 for autopilot and you actually have time to enjoy the battle!

You can take over from autopilot any time you want to get creative, but it is quite pleasant to let the autopilot steer you to the primary and alternate targets and back to base. Don't worry--you won't be bored. Depending on which mission and level you select, there will be plenty of hostiles to keep you busy.

I bought *F-19* only a couple days ago and already have sorted enough to antagonize my usually patient wife. So this is not one of those wring-out-the-program--multimonth--experience reviews. Instead, it's a quick and dirty alert that *F-19 Stealth Fighter* is another terrific MicroProse program that you don't need to have turned inside out by someone else before you realize you really want to get this one quick and play it as soon as possible.

Attack Bomber, Not Fighter

Having said all that, we must acknowledge that *F-19 Stealth Fighter* is an attack bomber, not an ace-maker fighter like *Falcon*. With its main weapon being comparative invisibility to radar, *F-19* is best at sneaking up on ground targets at night. Stealth can wipe out bunches of enemy aircraft (e.g., defending against fighter attack or ambushing a VIP transport), but its main job is taking out land- or sea-based stuff.

So don't try horsing Stealth into extended vertical climbs and gut-wrenching turns unless you want to flop ignominiously down to terra firma. *F-19* flies nicely, but not spectacularly. As the *F-19* description says in the excellent 192-page glossy manual, maneuverability is only fair to good. Partly because its two GE F404 turbofan engines do not have afterburners, *F-19* max speed at sea level is a leisurely 530 knots (Mach 0.8), and at 36,000 feet only 640 knots (Mach 1.1).

Typically Fabulous MicroProse Manual

The detailed and professional manual, typically fabulous MicroProse, notes that MicroProse first published the Stealth Fighter simulation in 1987, a year before the U.S. Air Force announced its *F-117* stealth

fighter had been operational since 1983. MicroProse in 1989 began work in the United Kingdom for its Atari ST and Amiga *F-19 Stealth Fighter*, and chose to "retain the original characteristics ... as a testament to the accuracy of MicroProse's research, and to enhance the simulation by including an option to see the actual *F-117A* plane in external views."

Meaning, *F-19 Stealth Fighter* offers either the more graceful *F-19* guesstimate or the angular *F-117A* for your visual pleasure, similar to the choice of two different designs in *F-29 Retaliator*. But the latter simulates the advanced tactical fighter now under development, a real hot rod compared to the actual low and slow Stealth Fighter.

However, *F-19* does not require a separate 50 hertz disk like *F-29*, nor does it have any annoying thin horizontal lines at the top of its screen, the way *F-29* appeared on some Atari monitors.

Massive Program

A massive program (five megabytes in development) compressed in three disks to expand in memory each time it loads, *F-19* wants a cold boot with minimum system competition. Although the IBM version apparently could be loaded on hard disk, the Atari version doesn't want to reveal folder or files, so I have postponed further attempts to load it on hard disk after several failures.

Bypassing the hard disk drive boot by simultaneously pressing down the control, shift, and alternate keys, I booted up *F-19* on my 1986 Atari 1040ST with TOS 1.0 and two floppy disk drives. After some missions, *F-19* wants its third disk inserted for mission review, but usually just A and B disks suffice.

F-19 is definitely one of the easiest simulations to fly. While not overly sensitive, neither will it forgive prolonged inattention. *F-19*'s comparatively slow speed makes it much easier to control than *F-16 Falcon*. Graphics are excellent--lots of ground details, good colors, and fairly realistic friendly and enemy aircraft.

Incidentally, it took a *Falcon* demo at a Woodbridge Atari Users' Group meeting to open my eyes to the overlooked value of keyboard flight controls. While one pilot and I wallowed all over the sky with flailing joystick and mouse, another sat there barely moving,

his fingers flicking calmly over a few keys to fly his F-16 like an Air Force Thunderbird compared to our dweeby gyrations.

Now I fly *Falcon* only with keyboard, and I find *F-19* precision and comfort equally improved with keyboard control rather than joystick or mouse. I wish all simulations offered keyboard control.

As for sound, *F-19*'s is nothing special; it ignores Tweety Board enhancement. Maybe this is because this version is marked STe for the new 1040 with stereo sound built in. Since Stealth graphics and color already are excellent on my old 1040ST, it would be interesting to see if this program is one of the first to take advantage of the 4,096 colors and stereo sound of the 1040STe.

Like Combination Falcon and Strike Eagle

Overall, *F-19* seems somewhat like a combination of near-*Falcon* graphics and *F-15 Strike Eagle* tactics. Graphics are smooth and compelling but neither photo quality nor quite as impressive in some aspects as *Falcon*, when something blows up or burns, you get MicroProse's rather angular representations of the event. Opening credits are nowhere near as stunning as MicroProse's *Gunship* or *Red Storm Rising*.

Play is reminiscent of *F-15 Strike Eagle*, with four regions (Libya, Persian Gulf, North Cape--Norway, Sweden, Finland, Soviet Union--and Central Europe), three war levels (cold, limited, conventional), two types of missions and training (strike or air-to-air), four types of opponents (green, regular, veteran, elite), and three types of flight performance (no crashes, easy landings, realistic landings). In other words, you can set yourself up for a good time any way you like it.

F-19's cockpit display has the situation map on the lower left and equipment status on the lower right. Information is presented with a nice balance of detail and simplicity to avoid sensory overload.

Stealth has three view innovations that are definitely habit forming: chase plane, tactical, and reverse tactical. In chase plane, you view your F-19 from behind in rollercoaster fashion, the way another pilot following you would react to your moves after a slight delay. In tactical, you again are behind your F-19, but positioned slightly to the side so you can see whatever enemy target your Stealth is tracking. In reverse tactical, you are behind the F-19's target, looking past it toward whatever inbound weapon you have inflicted upon it.

Net effect is like watching yourself participate in an air combat movie. You have to switch back to the cockpit occasionally to track and fire, but from then on

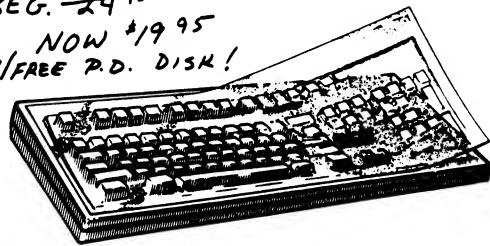
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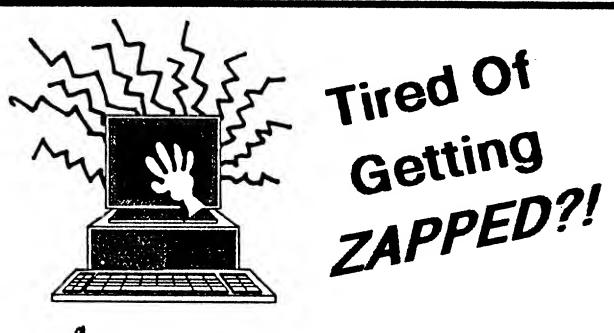


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F-19 also introduces you to more details of radar than you've ever seen in a flight simulator, and provides several additional weapons that you might not have used before, e.g., Penguin-3 ASM, GBU-12 Paveway, CBU-72 FAE, Mk 20 Rockeye II, and others.

A Few Quirks

Unfortunately, there are some annoying quirks. I wish *F-19* would load from a hard disk. The alternate key control is quirky; the program won't quit (Alt-Q) or disguise itself (Alt-B for "boss"). Although the manual didn't say so, I discovered Alt-N sometimes toggles between night and day screens. So while most real Stealth missions are at night, it's much more fun to pretend-fly them in daytime. (If you were an enemy pilot, imagine your old-fashioned World War I visual combat delight in finding an expensive all-black Stealth fighter or bomber coming at you over the North Pole icecap during the long Arctic summer when the sun barely sets!)

As a semiskilled recruit of *Flight Simulator II*, *Jet, Falcon (F-16)*, *F-15 Strike Eagle*, *Air Warrior*, and

Battlehawks 1942, I was able to resist *F-16 Fighting Falcon* and *F-29 Retaliator*, but not *F-19 Stealth Fighter*. The biggest reason why I succumbed to yet another flight simulator is the excellence of MicroProse Atari software. Think about the MicroProse products: *Silent Service*, *Gunship*, *F-15 Strike Eagle*, *Pirates*, *Red Storm Rising*—all classics, all offering maximum value for the money.

Comparisons to other flight simulations are inevitable, so how does *F-19* fare? Maybe because of the difference in the aircraft they represent, *F-19* is not as exhilarating as *Falcon*, nor does it offer the capability of flying against live opponents by either direct cable hookup or modem.

And nobody has aircraft and ships as pretty as those in Lucasfilms' *Battlehawks 1942* (so when is *Their Finest Hour* coming, huh? "Soon," as Susie says?).

But MicroProse is unexcelled in extremely playable and educational flight simulations. Realistic multiple scenarios coupled with fun flying and graphics make *F-19* a must buy for simulation fans. Overall, I'd have to give *Falcon* the edge as best flight simulator, but I rank *F-19* a must-buy second and *Battlehawks 1942* a must-buy third.

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Program of Month Club?

F-19 Stealth Fighter continues the proud MicroProse tradition. Indeed, MicroProse programs are so good that this is one of the few companies I would consider subscribing to like a book of the month club. Whatever the next product is, just send it along when it's ready. Like a vintage wine company, MicroProse knows not to release anything before its time.

Yet... Atari enthusiasts had to wait a long time for *F-19*, and *M-1 Tank Platoon* is nowhere in sight. Since *F-19* for Atari and Amiga was delegated to the UK, let's hope MicroProse doesn't fixate on IBM and compatibles. After all, the six quadrillion users of that creaky DOS system may by sheer volume occasionally sneak up on Atari's Power without the Price, but they'll need more than RAM overdoses to achieve parity in Elegance without the Aggravation.

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ULTIMATE GOLF

When the Ultimate Just Isn't the Ultimate

Reviewed by George W. Hulseman

If you're in the market for an ST golf simulation, then go to your nearest software dealer and purchase anything but Gremlin's new *Ultimate Golf*.

This remarkably bad program from England (known over there as *Shark Attack*) is an insult to both the ST and to Greg Norman whose name is used in a shameless attempt to lure unsuspecting gamists into throwing their money away. I seriously doubt Norman had anything to do with this one.

It's not that it is so bad, but that it completely lacks anything good which makes this such a lousy buy. As much as I hate to criticize any ST release, there's really not much else I can do with this one. So here goes.

This game gets bad marks everywhere, from the graphics and general game design all the way down to its copy protection scheme. It doesn't really compare to other golf games out there, most of which aren't much to write home about either.

Okay, maybe it's not that bad. If I had downloaded this game from public domain, I might have been mildly pleased. I guess I expected a lot, given the \$35 price tag, the sleek packaging, catchy advertising and, of course, the Greg Norman name.

But even with a lot of game options and a provision to play against rated computer players, *Ultimate Golf* completely failed to hold my interest. It was sheer drudgery to get through 18 holes.

Such options include being able to play in practice mode, strokeplay, matchplay, and other variations. Up to four can play in any combination of human and computer players. You can custom design your own swing for what that's worth. You can engage or disengage such factors as weather, ball effects, or bring a caddy along to make suggestions. You can change the level of difficulty and you can save a game in progress.

AtariFest 1990 Update

AtariFest 1990 will be held on October 6 and 7 of this year at the Reston Sheraton, 11810 Sunrise Valley Drive, Reston, Virginia 22091.

It will feature a giant vendors room with lots of bargains, dozens of valuable door prizes, special guests, and a chance to meet representatives from all the local user groups. There will be talks, seminars, and demonstrations of desktop publishing, business applications, art and animation programs, networks, bulletin boards, games, and MIDI music. Of special interest to non-Atarians will be the concept of Mac and IBM emulation on a machine that generally costs less and can do as much, or more! The Fest will cost \$7 for a 2-day pass, \$5 for a one day, children under 12 are free if with an adult. Each registered guest of the hotel will receive a free 2-day pass to AtariFest 1990. Hours are 10-7 each day.

To make a reservation at the hotel simply call the Reston Sheraton, 703-620-9000, and be sure to tell them you are with AtariFest. The rates are \$59 a night for a single/double, or \$65 for Triple/Quad. To get to the hotel take Rt 267 (Dulles Toll Rd) west to Wiehle exit, go left, turn right on Sunrise Valley Drive. The hotel is next to the tall black tower.

AtariFest 1990 is a production of WAACE, the Washington Area Atari Computer Enthusiasts, which is a federation of many local user groups.

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The screen shot on the right shows a typical ST desktop with Quick ST's desktop background feature installed. Supports .PI2 and .PI3 DEGAS pictures.

Also shown is the Quick Manager tool manager, free with Quick Tools.

Resource	Type	Size
028497 bytes used in 20 lte		
X FILLS		
X DUCKST	180	
X AFIRE202	255	
X HOME	7124	
DUCKST	84K	251185
MEASSTRU	DOC	2643
OREG	DOC	88101
OSTII	DOC	8039
DUCKST	PIG	3682
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As mentioned, the graphics are not what you would expect for the ST. A view of the fairway does not reveal an expanse of beautiful green, but a myriad of lines dividing the course into segments, presumably, to show areas of different slopes. These lines are visually obtrusive and disconcerting when you think of what a golf course should look like.

As in other golf games, you must have good timing in order to hit the ball well. First you select the club you want and then the direction in which you want the ball to travel. Pushing the joystick or mouse button sets the power bar in motion and where you release it determines the power of your shot. It also starts a direction indicator to swing back and forth like a pendulum. How close the indicator is to the center line when you push the button again will determine the trueness of your shot. If the indicator stops before the center line your shot will hook to the left. If it stops after the line it will slice to the right.

It's not too hard to get into the swing of things and before long you'll be on the green. Pitch shots are the most frustrating because it's so hard to figure how hard to hit the ball.

The terrain of the course is comprised of the usual trees, sand traps and water holes. The putting game is

no challenge at all. You don't even have to aim the ball. You simply estimate the putting power, push the button and let it go. Quite a change from *Leader Board* which I think has an excellent putting game.

This program gets my vote for worst game of the year and it's only August. It also wins the award for the most aggravating copy protection scheme ever devised (as if someone would want to copy it in the first place). Before you're allowed entry into the game you have to flip through the manual to match the course hole on the screen with one of 36 in the book. Some of holes barely resemble what's portrayed on the screen and you must rely on guesswork to get in.

Playing against the computer is a tiresome affair. The computer players are slow to respond which is no big deal in itself until you play a foursome. Better bring along a copy of **Moby Dick** or a Lynx game system. Better yet, have the four computer players play each other and go play 18 holes on a real course. When you get back the computer guys will still be at it.

Need I continue? This package really has no redeeming value. If you're looking for a good golf simulation look elsewhere (see Frank Sommer's review of *Nicklaus Greatest 18 Holes* CN July/August issue). Or go play the real game. It's less aggravating.

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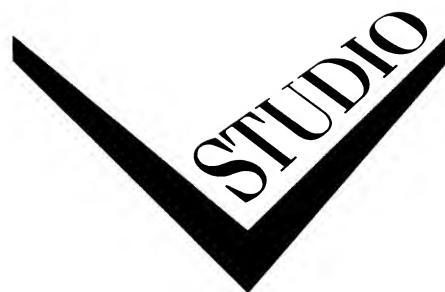
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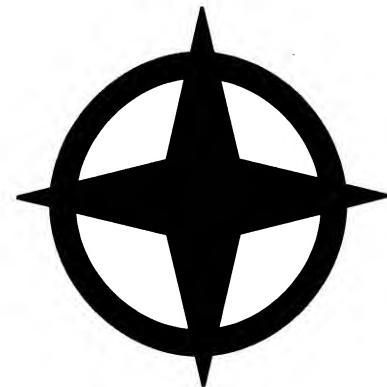
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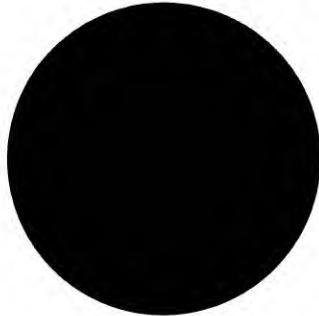
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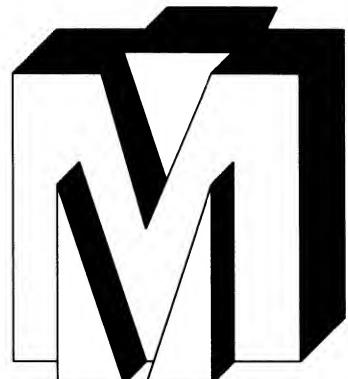
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Taking My 8-Bit on the Road: Atari in Korea

by Dave Harris

My Atari 800XL has saved the day once again by accompanying me back to the land of the morning calm, Korea. Thanks to a rather makeshift solution, I was able to begin computing as soon as I hit my hotel room in Seoul. Unfortunately, jet lag hit first so the computing was postponed for twelve hours of intensive sleep.

Missing my Atari 8-bit immensely the last time I was in Seoul was enough to motivate me into finding some sort of solution for transporting my Atari overseas. I quickly came to the conclusion that I would have to transform my 800XL into a semi-portable unit.

The 1050 drive and 800XL are fairly compact when stacked on top of each other. This gave me some ideas for designing a makeshift portable unit. After digging out my old grey travel bag, my suspicions were proven correct. The computer and drive would fit easily into one bag and that bag would fit, with room to spare, under an airplane seat.

While getting it into one bag was easy, carrying it for any distance was a little more difficult. I had stuffed disks, manuals, power strip, and any other general purpose computing equipment I could think of into the bag. This increased the weight dramatically, but it was still "lift-able."

Returning to Korea with a five-year-old child and a bag full of Atari computer equipment was no picnic. While my son is a great traveling companion, the hassle of making three connecting flights had left both of us in a rather depleted state. Looking on the bright side, though, I had managed to get my Atari through customs in one piece with no import tax.

Once settled in our hotel, the virtues of having a computer along became quite obvious. My son was able to amuse himself for hours with the game and educational software I had brought along. While I, on the other hand, was able to figure out the budget and continue my hobby, writing about Atari 8-bits. One thing for the cableheads out there to consider is that there is only one English language TV channel in Korea which is produced by the U.S. Armed Forces. While the channel is very good, the programming is limited due to a small operating budget.

Having lived overseas before, I was prepared for many of the difficulties we would encounter. The language barrier was the first major obstacle my son had to overcome. Many of the local Korean children were reluctant at first to associate with the new outsider who didn't speak their native tongue. Or at least, that was the case until he broke out the old joysticks and booted up some of his favorite games like Mr. Do and Arkanoid. Now the problem is reversed--how do I get them to go home?

My occupation in Korea is teaching conversational English to university students and businessmen. Like any job, it has its ups and downs. My Atari has enabled me to save time with my teaching duties. The repetitive nature of teaching lends itself nicely to computerization. A chapter only has to be prepared once with Paperclip and then saved to disk for future use. Files on disk serve as excellent non-paper portable filing cabinets. They are also a lot lighter.

Enough horn blowing about the greatness of the Atari 8-bit. Now for some rather interesting news for the diehard 8-bitters out there. I actually saw the XEGS on sale in a couple of the larger department stores in Seoul. Unfortunately, the price tag was slightly over \$200. That is comparatively high when compared to the MSX, Nintendo, and Sega game machines that can be bought locally. There is also a Singapore clone version of the Nintendo that sells for around \$50.

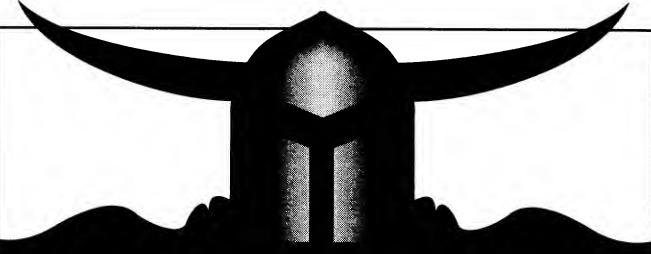
Regardless of the competition, it was still very exciting to see the Atari 8-bit so far from home. To top it off, there was even a good selection of game cartridge software for sale. While the stores had demo disk drives, they had none for sale and absolutely zero disk software in stock. It is sort of mind boggling to think that when I lived in Fargo, ND I couldn't find any new cartridge software for sale. To think all I had to do was move 10,000 miles away to find what I was looking for.

Unfortunately, there are no STs for sale. Although I did see some other advertisements with pictures and stories about the Lynx game machine, I think it will also be rather overpriced for this market.

The computer market in Korea seems to be evenly split between shops that carry the top-of-the-line, high performance machines like the IBM 286/386 clones and shops that carry mainly game machines. Some of the game machine software I have seen here is truly remarkable, especially the Japanese porno imports. Since this publication is read by younger children, I will leave the game descriptions out.

The selection of software seems to be expanding every day. Although a lot of the software seems to be released slightly behind the U.S. market, there is a ton of original stuff that I have never even seen in the U.S. The other big advantage that the game software seems to enjoy here is the low price.

I hope the 8-bit readers out there found this view from the other side of the world interesting. Now that Atari has conquered Europe and Asia, maybe they will reconsider actually marketing some products in the U.S.



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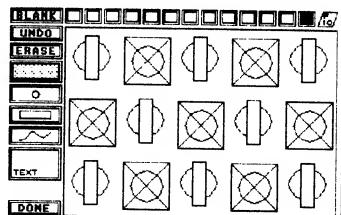
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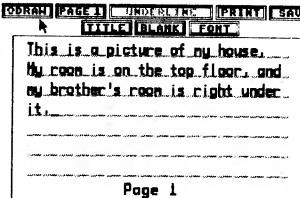
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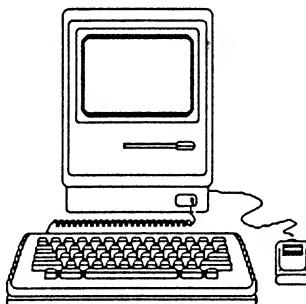
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Table Tennis Simulation

The Pre-Teen Genetically Pure Peace Loving Turtles Play Ping Pong
Review by Sam Van Wyck

I can't imagine what turtles have to do with the game of ping pong, but then, maybe the folks at *Starbyte* know something that we don't. Whatever it is, their new release, *Table Tennis Simulation* (TTS) features turtles on the box, turtles in the instruction book and even a turtle rock band serenading a pair of turtles playing ping pong. (Oh, all right! Table Tennis.) Actually, the difference is this: If you are playing with an old, splintered plywood paddle faced with worn off rubber dots or sandpaper, it's ping pong. If you have one of those Japanese foam faced jobs that costs the equivalent of a new disk drive, it's Table Tennis! Got it?

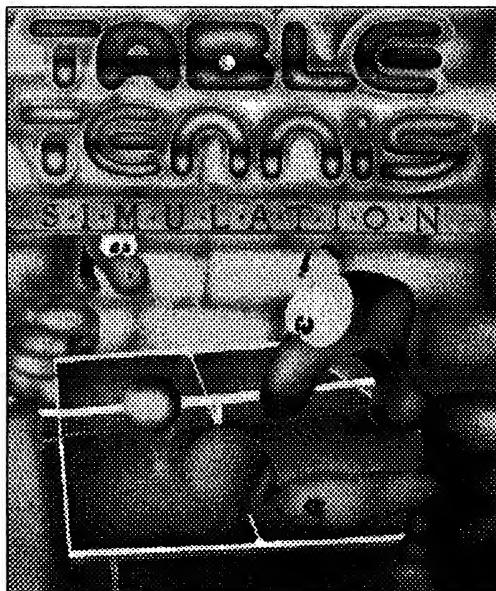
Despite the name and the numerous examples of the order *Chelonia*, their presence neither adds to nor detracts from this excellent sport simulation. Once you begin playing, your attention will be totally taken with the challenge of simply surviving the next service or volley. If you've never played before, it will be a bit tough to get started. On the other hand, if, like me, you have spent a long lifetime mastering the art, getting started won't be any easier.

Choices, Choices, Choices!

The show begins with a cartoon pix of two turtles engaged in a friendly match. Once the initial art work and musical offerings end, a number of menu choices appear. Do you want training or competition, tournament or straight games, singles or doubles? Choose a competitor. Will you play with another human or the computer? If so, in doubles, will you be partners or competitors? Choose your pad-

dle and style of grip. Choose how many games will make up your match; how many points will constitute a game; choose. . . Let me say one thing right now about the folks at *Starbyte*: they sure do go out of their way to give you freedom of choice!

The beginner to *TTS* might do well to go straight to training mode at first. After selecting a paddle and setting the style and difficulty, the scene shifts to a ping pong table in



your skunky, rat-infested basement. (It must be your basement; it certainly isn't mine!) Here, with nobody to see your mistakes, other than a somewhat bemused mouse in the corner, a tireless machine spews balls at about five second intervals. If your return is successful, the ball goes out of play and another pops across the table toward you. The escape key takes you back to the main menu.

Play Ball

Following a session or three with the machine, it's time to face

an opponent. If you choose to play against the computer, you may select either a singles or doubles match. Surprising as it might seem, doubles is an easier way to begin, as the computer will not only be your competition, it will also take the role of your partner. In *Table Tennis*, each player on a side alternates strokes so you only have to hit half the balls to stay in the game. Your computer partner will handle the rest.

Your biggest challenge will be learning to serve. This feature seems to be the least realistic part of the simulation. You *must* serve from behind the edge of the table. The only way to know that you are legal is to move your racquet toward the table until the shadow of the ball is seen. Then back up until it's gone. Serve from this position (at least until you are ready to experiment). Service is accomplished by pressing either mouse button which tosses the ball into the air. Now move your paddle sideways until its center is directly under the ball as it falls. *Resist the temptation to move the paddle forward!* Hold steady under the ball. It will hit the paddle face about at center and play is begun. By any standard, both your service and that of the reigning champion Fing Fang Fung (No, I am not making this up) will be, at best, whimpy; something you'd expect of your grandmother or a spastic cub scout.

From here on, though, the game becomes interesting. Let's assume you are playing singles against M. Jacques Higon, the lowest ranked computer player who plays "mostly block balls." I take that to mean that he generally

manages to return the ball without any real speed or fancy strokes. You may now play close to the net or well back from the table. Direction is controlled by the point at which the ball is struck by your paddle. A hit on center puts the ball straight across the table; to the left and it goes left; to the right and it goes right. Thus, unless you are trying a cross-table shot, it is most important to hit on or close to center.

Probably, your first few games will be taken up with simply trying to keep the ball in play. At first, I found it very difficult getting even five points against the computer's twenty-one. The service was especially frustrating. Eventually, though, you will be ready to get a bit serious.

Choices of Offense

Four stroke variations are available. The Block is as described above, a simple no-frills shot that is usually returned by your opponent. The Straight Stroke is extremely aggressive; a fast forward slam with no added spin. Properly handled, this one can be made to sizzle over the net. Topspin causes the ball to drop quickly and, upon hitting the table, it scoots off low down and dirty. For a change of pace, a Slice tends to balloon over the net and bounce high. The last three strokes are accomplished by holding down either or both mouse buttons prior to the stroke. As in the real game, they aren't at all easy to make but when they connect, they are truly beautiful and generally win the point unless your opponent is lucky or from the skilled ranks. Speed of return is also affected by your choice of racquet and the speed and spin of the arriving ball. As you can see, there are many variations possible in every play.

Since the skill and playing style of each of your opponents varies, it is possible to be confronted with a different challenge in every game

played. As a matter of fact, considering all the choices of game, opponent, equipment and tournament, one would probably have to play for years before running out of new things to try.

The table is viewed from a normal playing position; above and behind. Your racquet and that of your opponent are held by disembodied hands. The ball is well defined and moves smoothly casting a shadow directly below to give the illusion of height. In all, the playing graphics are very good, and concentrate on providing exactly the information necessary for accurate play. The paddle and table sounds are likewise helpful and realistic. (Sound is such an important adjunct to the game that when the soft-faced foam paddles were first introduced, there was a loud outcry against them because they muted the "click" of the ball).

After each point the score is displayed. A touch of the mouse button invites the next service. Once a predetermined score is reached, a game is tallied to the winner and after a brief (blissfully brief) musical (?) interlude, the next round begins until the match is complete. After that, it's back to the main menu for choices, choices, choices. The advantage of this is that you really do have the means to change things exactly to your liking. On the other hand, there is no way to save a particular setup and it gets old having to redo the entire list every time a match is completed.

The World Cup Series

Beyond the individual match there is the World Cup. Based upon a "knockout" system, up to thirty-two may compete against each other and the computer. Obviously, this could take days but it is possible to skip the computer-computer matches and merely read the results. Results of the Cup challenge as well as overall rankings are

saved to disk so, once again, you could spend a large chunk of lifetime moving around this simulation if you wished to. It is not a program to be taken lightly.

There Are a Few Negatives

Now, after saying all those nice things about TTS, there are a few negatives. First, the book can only be described as "barely adequate." Poorly translated from German, it covers the bare bones and not much more. I found myself wishing over and over that the author had taken the trouble to run the copy by someone unfamiliar with the program. A few basic rules of the game would also be helpful.

The opening and post-match music are truly awful! I found it reminiscent of the background noise to Quadrilien. It detracts, however briefly, from the rest of the game. Additionally, the disk is copyguarded to the point where it cannot be installed on my hard drive nor will it even boot if the hard drive is active in the system. I will say it again: I don't mind protective schemes but I resent those which prevent me from using my system as I wish to. TTS does this and I just plain don't like it. A key word lookup from the book would have sufficed. I would like to try one of the mouse accelerator programs for better control or use Screensaver to blank the display but neither is possible.

TTS may be played with a joystick but in this mode one is limited to straight shots; no fancy slams or spin. Definitely not recommended. Table Tennis Simulation is challenging, fun to play and versatile enough to challenge the expert while allowing the novice room to learn.

[Distributed by:STAR GAMES, 708 W. Buffalo Ave., Suite 200, Tampa, FL 33603]



Stuck in a Rut

by Sam Wright

Future Wars: Adventures in Time

Not many adventure games can achieve a movie-like quality, provide an interesting plot, supply a plentiful amount of humor, neatly integrate adventure playing with arcade action, deliver a satisfying ending, comment on political concerns, and, oh yes, frustrate the heck out of you. Interplay does all of this--and all of this well--with its French import, *Future Wars*, created by the talented Delphine Software.

You start out in the present as a humble window washer, oblivious to what underhanded goings-on your boss is involved with (is he really your boss, though?). Being the adventurer you are, you prod through your boss's things and find something which hasn't been seen since 65 million years ago and won't be seen until the 44th century: a time machine. Wait, they were making time machines 65 million years ago? Well . . . kinda sorta maybe. Suffice it to say, you'll find out.

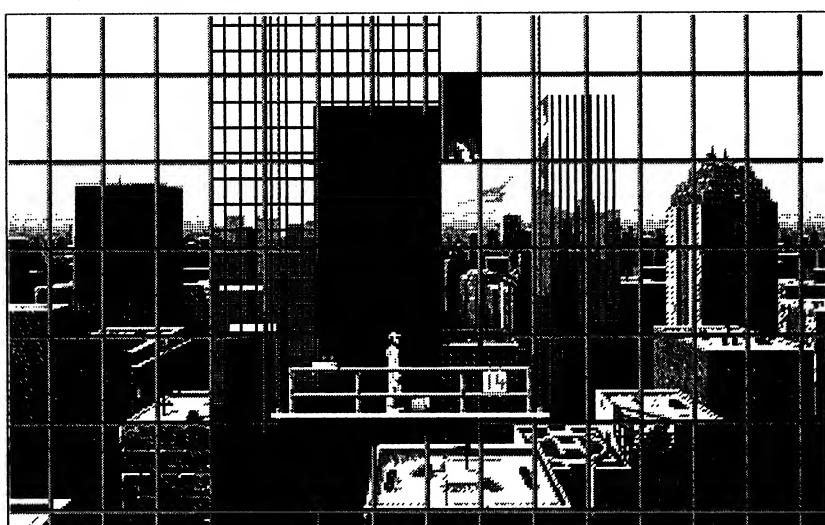
And you'll also find out the plot as you continue time-hopping through your journey. In fact, other than a couple paragraphs and an ominous sentence ("He

resides in the present . . . he has lived in the past . . . and he must travel into the future . . .") on the back of the game box, you're kept in the dark most of the time. The only documentation is a skimpy but colorful six-page manual of how to get started. The back of the manual provides the off-disk copy protection--a picture of your pants splattered with different-colored paint splotches (window washing alone won't pay the rent these days). At the beginning of every game, you're presented with a black-and-white computerized version of your pants with a particular splotch highlighted. Twice, you must choose what color it represents in the picture. Because the computer drawing isn't an exact replica, you'll get it wrong a couple times and be forced to reboot, but if you keep an eye on the shape of the splotch, you'll get the hang of it.

In a way, this lack of knowledge to what's going on works to the game's advantage. As you progress through the various time periods, characters reveal bits and pieces of their war with the Crughons and why they've traveled back in time and . . . whoops, mustn't give too much away. You're encouraged to continue playing to find out why it is you're playing.

Future Games contains other such intriguing themes and humor, much like the wry and subtle wit of the movie *RoboCop*. The jokes translate very well from French and several times made me laugh out loud. Like *RoboCop*, *Future Games* can be taken as a satire on our society, but most importantly and uncommon in most games, it has something to say.

All this almost makes up for Cinematique, Delphine's clunky user interface. Completely mouse-controlled, the only text input required is naming your saved games. This type of interface works with Sierra's or Lucasfilm's adventures, but falls flat in *Future Games*. Except for the arcade sequences, controlling your movements is much easier and more precise using the numeric keypad. The mouse is needed, though, to select one of six verbs that pop up in a window: examine, take, inventory, use, operate, and speak. With the parser drastically shaved in the number of possible combinations between verb and noun, the game is simpler than it should be. I found myself most stuck when unable to find the minute objects sprinkled abundantly throughout the game. Once I had an object and couldn't figure out what to do with it, I went through all the verbs and methodically tried them on all the nouns I could find. Hey, when you're stuck, you'll try anything, right? *Future Games* has a lot of hard puzzles because the solutions aren't always in plain sight. Objects are smaller than needles in



Life as a full-time window washer can't be all that bad!

swampland. The problem is made worse by extremely dark colors. The question isn't how to solve the puzzles but where to find the objects. In other words, it's as close to life as you'll ever get! You actually have to be near an object to be able to see it (no more telescopic vision as in all the other adventures). The words "get closer" will forever haunt your dreams.

The frustration factor is indeed higher for *Future Games* than in other adventures. All I can say is put up with the awkward and imprecise movements, the limited parser, the hidden objects, the almost unfair arcade-type action, the misspellings, and the unstoppable animation sequences which get to be extremely long if you've already gone through it once. If you persevere, you'll be rewarded with a satisfying ending that will leave you hoping for a sequel.

Future Wars: Adventures in Time, \$49.95 from Interplay Productions/Delphine Software, runs on all color Atari STs and comes on two double-sided disks. It is copy protected by documentation (identifying colors) and can easily be run from a hard drive, taking up about 1.2 megabytes with all ten saved games. Version 1.04 was reviewed.

Characters

Because you're left with a minimal number of verbs to interact with, use what you can to their fullest potential. Examine everyone. Show objects to everyone. Speak to everyone. You just may get a response.

Creature, sewage: Pity the poor muta-octopus. It's only trying to survive.

Crughons (battle): Get those Croutons! Aim for the ones closest to you and the "danger"ous ones.

Customers (inn): Provided you've got the money and the time to hang around, they've got some revealing things to say about Father Superior and his band of monks.

Dixie Flatline: You mean Albert II?

Guard (drawbridge): To stand there all day holding that heavy lance must be tiring.

Hens: Maybe they'll let you share their food if you become one of them.

Hostess: She's often busy and not paying attention to what's going on.

Inspector (airport): Creating a diversion to distract him just might work.

Lo'Ann: Don't worry, they'll fix her. They fix everything. (With apologies to RoboCop.) Don't let that prevent you from searching her.

Master: Waiting around for him isn't particularly productive.

Molly: Why does she have glasses for eyes?

Monks: Unchristian ceremonies? Wild packs beating up people? Could these be real monks?

Moose: How'd he get in there?

Wolf: If the monks aren't real, what is? Does something strike you as odd around his tail?

Locations

Bathroom (airport): If you really need to go, try crawling under the door.

Fortress: Save first, map later. It's fairly straightforward. Although you want to continually go down, you'll more than likely have to go up. The opposite is true after you've disarmed the bomb.

Inn: "If yer've got the money to pay, yer welcome . . . if not, beorff wiv yer!"

Monastery: When in Rome. . . . Go around the rooms in a clockwise fashion.

Ruins: There are objects you shouldn't leave without. There's a hidden entrance you can't leave without.

Sewer: Attention to details will fuel your future endeavors.

Swamp: The shortest line between two points is usually a straight line. Keep your eyes open; there may be a pot of gold at the end.

W.C.: Someone's been playing dictator in the bathroom.

Wine cellar: This could be your ticket out of there!

Objects

Future Wars contains objects that are hard to see on first glance (and even on the second or third). Your best bet is to click on "examine" and slowly search the screen with the mouse. As the manual points out, some objects are only one or two pixels wide, so they won't show up in the display window after "examine" unless you scan the area slowly. Descriptions of objects aren't as important as in other adventures; most of the time the name of what it is will suffice. However, pay attention to the descriptions when they first appear, because you won't get another chance to examine something once you pick it up (nor will you be able to drop it). In *Future Wars*, the most important thing is to not overlook any potentially hidden objects. Unless you save often, you'll end up restarting frequently just to comb through early scenes to search for objects you may have missed. Have confidence in yourself, though. Go back to the beginning only as a last resort.

Air duct: It's the main source of air for the entire ship.

Barrels: Of laughs? Of fun? Of monkeys? What's left?

Bomb: Remember what Albert II said. You have six

minutes TOTAL "to reprogram the bomb and make your getaway." Save often.

Blowtorch: Every mother and child should have one.

Bucket: Sometimes your boss just can't help being set up to getting all wet.

Carpet (office lobby): Think of it as an oversized welcome mat.

Cassock: Have you tried shaking it down? Is there something that can extend your reach and pull it down?

Chairs (office): If his door opened the other way, you could wedge it under his doorknob.

Cup (gold): Father Superior's favorite.

Documents: Those figures could be the proof you need.

Ecu: See an ecu, pick it up, the rest of the day have good luck.

Fuse box: Now where were those replacement fuses?

Fuses: The replacement fuses you have are all in working order.

Gas capsule: It could free your life.

Glass case: Examine it. To work it, something else must first be turned on.

Insecticide: In the swampland, you'd think they'd be immune to a city concoction like that.

Key: It's small enough to be useful for other tasks.

Lance: Would the guard accept a trade?

Magnetic cards: Computers eat 'em up with glee.

Map: Look closely. What's missing?

Newspaper: It could save your life. It also provides a decent cover.

Newspaper stand: Sometimes people are in too much of a hurry to grab their change.

Pendant: Someone may have lost it. Report it to the guard.

Photocopier: Check out the buttons on the side.

Pill (invisibility): Claude Rains would be grateful if it doesn't last that long.

Plant: Potted plastic goes with the carpet.

Plastic bag: Tap water is too thin. Does salt water freeze faster?

Rope: Go climb a tree!

Shuttle: Don't worry if you miss it; all shuttles go to Paris IV.

Ticket (to Paris IV): Try bartering with the ticket scalper.

Typewriter: That number may come in handy some-day.



In preparation for the killer monks.

Videocamera (bathroom): Smile! You're on "America's Funniest Candid Videos."

Videocamera (outside shuttle): The automatic door can't "see" you. Can you reach the lens to clean it?

Videocamera (inside ship): Ah ha! A spy! Prevent them from spying on you.

Situations

After the battle: Because of a bug in version 1.04, your perspective will be off (although that would half-explain your confusion of Croutons for Crughons) and the game may even crash. Don't walk toward the top of the screen. Go to the bottom a couple times and then walk over to the ship.

Avoiding automatic capture by the Crughons in Cretaceous: Search the ship some more. You're overlooking something.

Getting out of the monastery: Something you've used before will be of use again, but in a different room.

Getting past the crazed monks: In both cases, a disguise is in order. Just don't make a habit out of it (sorry, couldn't resist).

Getting past the Crughon guards inside the ship: Like the video camera, if they don't know you're there, they can't find you. Hint I: You've run out of costumes. Hint II: Lo'Ann has something you need.

Getting past the Crughon guards outside the ship: Don't get boxed in by the guards; get out of plain sight.

Nowhere else to go outside of the inn: Explore. There are other exits besides the one you came from.

Setting off the alarm in the photocopier room: Don't panic! Sometimes escape is a couple footsteps away.



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The 8-Bit Alchemist

by Ben Poehland

"If chemists and physicists are the modern inheritors of the alchemical tradition, then the marriage of those two disciplines in the science of microelectronics is the new alchemy of the twentieth century. The ancient alchemists held as their goal the transformation of man as well as the elements. The new alchemists, in the process of transmuting silicon into digitized information, are effecting social changes as profound as those which followed [invention] of the wheel, the steam engine and the automobile."

--Dirk Hanson, 1982

Welcome to a new column in *Current Notes*. Those of you who keep an eye on magazine mastheads will have noticed my name replacing Len Poggiali as XE editor beginning with the June 1990 issue. With the decline in support for 8-bit products Len's "XE Update" column was growing a bit sparse. We all owe Len our thanks for his efforts to bring us news of the latest developments in 8-bit hardware and software. But times have changed, and if an 8-bit presence was to be maintained in *Current Notes* a new orientation was appropriate.

What new orientation? If you read my articles in the June and July/August issues you already know that I'm a diehard 8-bit enthusiast with a heavy leaning to the hardware side of things. For example, next month you will find Part I of a series of articles on 8-bit power supplies (I'll be doing occasional feature articles as well as this column). I read somewhere that there are some 2 million 8-bit Ataris out there, including the 400-800, XL, XE, and XEGS machines. Many of these systems are 5-12 years old and are probably exhibiting signs of age. In the months ahead you can expect to see articles on hardware "secrets" and maintenance tips that hopefully will allow you to keep that old 8-bit going. I also hope to present a few simple hands-on hardware construction projects for those of you hardy and brave enough to "roll your own."

8-Bit News

The Alchemist certainly doesn't intend to abandon bringing you news of developments in the 8-bit world. As walk-in outlets for 8-bit products decline, public

A New Editor, a New Column

domain software and mailorder sources are assuming greater prominence. I am planning at least two forthcoming columns dealing with the 8-bit market and will keep you posted as changes in the marketplace occur.

While I think of it, I have four newsy items to drop before I continue:

ICD hasn't shipped **P:R: Connections** since about February and as of this writing (July 1990) is still not shipping. The problem seems to be the Far East supplier of the custom surface-mount ROM that is the heart of the P:R:. ICD has no idea when new ROM's will be available, and orders are backed up everywhere.

Newell Industries (1213 Devonshire, P.O. Box 253 Wylie TX 75098 214-442-6612) has discontinued **RAMROD** for the 400-800 computers. RAMROD-XL/XE and OMNIMON are still available for XL/XE machines.

Newell is developing a **1-meg RAM upgrade** for the 800XL, 1200XL, 65XE, and 130XE that should be available by the time this article appears in print. Preliminary information indicates the basic upgrade kit for any of the above computers will cost \$49.95. A set of 1-meg DRAMs will cost an additional \$56.00 (May 1990 price), and a further charge of \$30.00 will be incurred if Newell performs the installation. Imagine, 1 meg on an 8-bit. Whew!

Someone (Atari???) has dumped a number of **5200 game machines** on the electronic salvage market. They are all defective returns being sold without game controllers, cartridges, or power transformers. You can get them from All Electronics (15004 Oxnard St. Van Nuys CA 91411 800-826-5432) for \$7.50 apiece. If you want to obtain a spare set of Atari 8-bit custom LSI chips (POKEY, ANTIC, GTIA, and CPU) and a set of 16K DRAMs, this is a good way to do it on the cheap. I bought several of these reject game machines and found all the custom chips to be functional in my 800XL. The circuit boards also provide a wealth of other parts which the Alchemist has already "transmuted" into several electronic projects. I was surprised at the quality of construction in the 5200. Whoever heard of a kid's toy built to mil-spec?

Biases and Stuff

Regrettably, the Alchemist isn't much of a programmer. I've written some general BASIC routines and occasionally modify other peoples' stuff, but my BASIC programming skills are barely above Primitive. Early on, I made a decision to standardize my hardware as much as possible. Thus, even after XE machines were available, I continued to acquire XL stuff. My core hardware consists of five 800XL's and eight 1050 drives. I cut my teeth on the 1027 and 1025 printers and later graduated to the Epson LX-80 and L-1000 for graphics and serious wordprocessing. Although I'm a hardware enthusiast, I'm by no means an electronics expert. If someone writes in with a hardware problem, I'll recommend whatever remedy I can, but without any guarantees. I do have a good collection of hardware manuals for the Atari 400/800, 800XL, 130XE, 850, 1050, 1025, 1027 and even (cough!) the ST; I also have manuals for peripherals such as Apple, Heath/Zenith, and Commodore monitors and Epson printers.

Here is a breakdown on how my computer time is spent: wordprocessing, 50%; electronic repairs, tinkering, and mods, 20%; telecommunications, 10%; databases, 10%; graphics, programming, and entertainment, 10%. My greatest frustration with 8-bit computers has been the lack of serious applications for them. In a forthcoming column I plan to challenge the 8-bit programming community with some projects for serious technical applications of XL/XE machines. The Alchemist also deplores the video game stigma that has hindered serious applications of 8-bits. You will have to look elsewhere than the pages of this column if you want to read video game reviews.

The Alchemist is a chemist by profession. I work in the R&D lab of a big pharmaceutical company, and my specialty is natural products chemistry. Natural products chemists are the witch doctors of the chemical world. We extract tree roots, leaves, smelly dead things from the ocean, and fermented fungus in the hope of finding tomorrow's wonder drugs. My work involves a weird mix of hi-tech hard science, gut intuition and good luck. I got the science with a B.S. in chemistry, the intuition depends on what I had for dinner last night, and the luck comes from incantations to the Murphy Demon accompanied by ritual scattering of Floobydust (stolen from National Semiconductor under a full moon). On a daily basis I feel a kinship with my medieval predecessors as I attempt to "transmute" the gross matter of our natural environment into drugs that might one day cure AIDS, cancer, herpes, or heart disease. Curing disease and lengthening life were among the traditional goals pursued by ancient alchemists.

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The New Alchemy

Today there is a new type of alchemist, and to the extent that I spend my spare time dabbling in electronics I feel a kinship with the new tradition as well. What is this new alchemy? Quite simply, microelectronics. The 8-Bit Alchemist enjoys tinkering with electronics and computers in much the same way the alchemists of old tinkered with chemistry. In 1983, I read Dirk Hanson's book **The New Alchemists** (Little, Brown & Co., Boston, 1982), and it blew me away. (The quote at the beginning of this article was taken from the Introduction to **The New Alchemists**.) The excitement I felt at reading Hanson's account of the microelectronics revolution has never left me and is the real source of my inspiration for this column. Sadly, the book is out of print already.

Basically, Hanson presents a vision of how advances in physics and chemistry beginning at the turn of the century with the work of Tesla, Edison, and DeForest lead to the microelectronics revolution that still rages in Silicon Valley today. The book is shot through with spellbinding episodes of everything from Nikola Tesla's lightning bolt experiment to the genesis of Atari from Nolan Bushnell's experience working summers in an amusement park. Ever wonder how General Electric got started? Or Westinghouse? IBM? Apple Computer? Hanson weaves the beginnings of these companies into his tale along with the men and discoveries behind them. Do the names George Boole, Charles Babbage, Herman Hollerith, John Mauchly, William Shockley, Robert Noyce, Jack Kilby, Charles Sporck, or The Two Steves mean anything to you? They should. If you use a computer, any computer, the work of these "new alchemists" is affecting your existence at this very moment. (OK, next month I'll give you the low-down on all those names.)

There were two Atari-related tidbits in **The New Alchemists** that I found especially intriguing. I didn't know Steve Jobs had quit working for Nolan Bushnell at Atari in order to start up Apple Computer in 1976. And in 1979, when the FCC first tested all existing brands of home computers for radio frequency interference, only the Atari machines passed. My, how times have changed. Today, Apple is a corporate giant doing battle against IBM while Atari struggles just to maintain its pinhead-sized portion of the computer market. And Atari's recent RFI fiasco with the STE is a far cry from the days when Atari machines were the "cleanest" on the block.

The 8-bit computer was king at the time Hanson wrote his book; he marvels at the advent of the 64K DRAM. When I bought my first 800XL in the winter of 1984 I had no notion of the incredible speed of the technical revolution represented by the product I had purchased, nor did I realize how much it would change

my life. In just a few short years Hanson's book has been relegated to obsolescence, along with millions of the 8-bit computers which so impressed him: a fitting commentary on the technological juggernaut he so elegantly describes. Today, the technology that began with 8-bit home computers has mushroomed to 16-bit and now 32-bit machines; and the New Alchemists are already prototyping 64, and 128-bit designs. No doubt those advanced Alchemists look down upon an 8-bit fogey like me as a throwback to barbarous times, much as I view the alchemists of the Middle Ages.

An Invitation. If I had waited a few years longer the 8-bit tide would have receded, and my first computer might well have been a Macintosh or ST. Sooner or later I would have opened the thing up and tinkered with it; then maybe I would be starting up this column under the moniker of "The 16-Bit Alchemist." Instead, I invested heavily in the level of computer technology which was already familiar to me. Throwback to barbarous times as I might be, I don't regret the investment I made. I use my beloved 8-bits every day, and I'm convinced that an 8-bit machine can satisfy all the demands made of a computer in the average household: anything more is a waste. If you share these convictions, stay tuned to "The 8-Bit Alchemist"!

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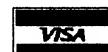
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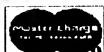
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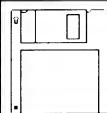
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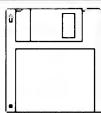
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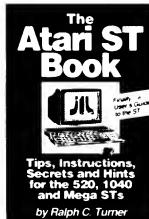
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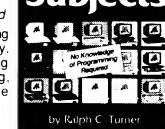
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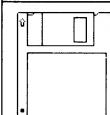
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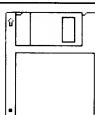
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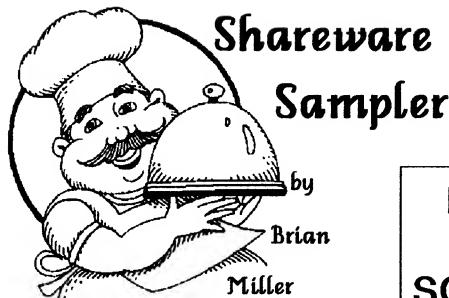
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DO NOT STAMP SOFTWARE

At the close of last month's column, I mentioned that I was lucky enough to receive a diskette with several useful programs to try out and pass on to you. The programs were sent to me from one of our ST's faithful shareware authors, Mr. Gordon Meyer PO Box 467 Des Plaines, IL USA 60016 GEnie and DELPHI: GRMEYER Compuserve: 72307,1502 Internet: 72307.1502@compuserve.com

Mr. Meyer's vocation is in the Data Processing field, yet he manages to write programs for the Atari ST in his spare time. He distributes his freeware and shareware programs under the name of "DO NOT STAMP" software. Mr. Meyer reports in his bio-information that he began programming with the Adam computer before moving up to the ST.

I have already sent a copy of his programs to *Current Notes* to be added to the software library (see CN #489). I will present a brief summary of the "DO NOT STAMP" programs sent to me.

AREACODE.PRG Have you ever had to hunt down the area code of a particular city to complete a phone call? More than likely you have answered yes. Like me, you have probably searched through your phone book in the hopes of finding the needed area code. Even if you are successful, this task is laborious and tedious.

Postal Abbreviation Finder (version 1.0) 12/25/89
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 Not to be sold, this program may be copied but not for profit.

Another fine product from...
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A simple and humble program... you enter either the state name (full name, spelled correctly...if you can't manage that then use a phone book) or the two letter postal abbreviation.
 This program will return with whatever it was you DIDN'T supply.
 Yup...you got it...give it the state...it gives you the abbreviation.
 Or, you can give it the abbreviation and it will give you the state.
 Yippie! Aren't computers fun?!

Press a key...

Mr. Meyer's program will give you the same information painlessly. After loading AREACODE.PRG into memory, you simply type the name of the State that you plan to call. You will be presented a list of the names of the cities and their equivalent area codes.

For your convenience the time in each location is given in reference to your system's clock. Not only will you have your Aunt Tilly's area code in an instant, but you will know whether it is too early or too late to give her a ring.

POSTAL.PRG Another useful program written by Mr. Meyer follows a similar theme to his AREACODE.PRG. The POSTAL.PRG gives you the abbreviation for any State that you type at the prompt. The program also works in reverse, by giving you the equivalent State name for any postal abbreviation you input.

postal v1.0 12/25/89

Enter two letter state abbreviation
 or full name of state

(enter INFO for help) va

POSTAL ABBREVIATION	STATE
---------------------	-------

va VIRGINIA

...search completed.

Exit program? (y/N) ■

This program is far from elegant, but like the area code program it fills a useful niche. Most of us wouldn't need a powerful computer to give us area codes or Postal abbreviations. If need be we could rely on our basic reading skills and an ounce of patience to get this information for ourselves. However, it is certainly convenient that Mr. Meyer has taken the time to write these utilities which can give us this information in a fraction of the time, freeing us to pursue nobler challenges, or at least more time to play Dungeon Master.

SHREDR.PRG This program will harken memories of Ollie North and his loyal secretary Fawn. As the name suggests, SHREDR..PRG will permanently shred any data you select from a given disk. Ordinarily, throwing a file in the trash merely "flags" it.. This flag tells the operating system that the space occupied by the file can be written over. Only after you have written to disk on subsequent occasions will that space be used by other data, and the original file destroyed.

For most of us, most of the time, this method works out quite well. In fact, if we should later discover that we threw away the wrong file by mistake, we can often recover the data using an un-delete program.

However, if you have a need to make sure that some of the information on your diskette remains classified, or if you are just naturally wary, then this program will put your mind at ease. The SHREDR.PRG writes to the disk and permanently obliterates the

selected file. The program treats you to clever graphic depiction of the task at hand. It also gives you an ample fail-safe mechanism giving you a couple of chances to change your mind, and abort the destruction of the selected file.

HOTSTAT.PRG Hotwire by Code software includes a ledger program which records the use of programs. The original ledger will write a separate record with elapsed time each time a program is used. This means that if you were to use Flash to go on-line with GENie, exited, used Word Writer to type correspondence, and then returned to Flash to call GENie again, the Hotwire ledger would record each use of Flash as a separate entry. This may actually suit your needs, in which case Mr. Meyer's program may be of little interest.

On the other hand, if you would prefer a summary of the use of a particular program as one entry, then Mr. Meyer's HOTSTAT.PRG provides a useful alternative to recording this information.



I have given a fairly quick look at Mr. Meyer's "DO NOT STAMP" software. I hope you may find his programs of use. I want to extend my thanks to Mr. Meyer for his loyalty to our ST, and his willingness to take the time to write software which is useful and clever. Most of all, I want to thank him for making my job easier. For the first time since beginning this column, I did not have to grapple with the decision of what shareware or public domain software to feature. Finding his letter and diskette in my mailbox was quite a thrill.

I have my work cut out for me next month as well. Another shareware author from Severna Park, Maryland has done me the honor of sending me a diskette with two of his shareware programs to examine. Be sure to reward our shareware authors by your patronage. Please feel free to send public domain or shareware programs which you feel deserve recognition to: Brian Miller 13848 Delaney Road Woodbridge, VA 22193 Until next time,

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#461: Calamus Outline Art Demo --(M) Working demo (but no SAVE) to this companion program to Calamus allows you to create your own vector graphics. Requires 1MB, DS drive, and mono.

#462: Bloodwyck Demo -- (C) Fully-playable "dungeon Master" game by Mirrorsoft includes split-screen for two-player simultaneous action.

#463: Blood Money Demo and Wipeout -- (C) Fully playable demo of BLOOD MONEY, one of the best horizontally-scrolling shoot-'em ups for the ST! WIPEOUT demo, the manic thrills of Hoverboarding await you in Intergalactic Hoverboard Challenge. FONE VOICE, fun little utility that allows you to create crazy messages for your telephone answering machine. Disk also includes SPINNING BOXES animation.

#464: Personal Finance -- Payroll, (V3.0, fully-functioning program allows for complete payroll operations, quarterly reports, printing paychecks, up to 200 employees can be monitored). Cost of Living Adjuster, Checkbook V1.14, and Personal Finance Manager demo (database program to handle personal bank accounts, etc. no PRINT function and only 30 entries).

#465D: Mail Pro & Stocks and Bonds -- (M) Mail Pro: filing and mail-merge system, create and retrieve form letters, establish records, print mailing labels and return address labels. Demo version offers limited entries. Requires 1MB. Stocks and Bonds is a game (note: this is not a demo) based on the fast action stock market game.

#466: 16-Voice Sequencer -- by Henry Cosh, features multi-voice recording, split keyboards and/or velocity ranges, simple editing using mouse and MIDI keyboard.

#467: MIDI Music Maker--Comprehensive music player capable of playing many of the thousands of music files available through the public domain for several types of computers. Can handle Music Studio, Music Studio 88, Music Construction Set, EZ-Track, Standard MIDI Files, Sid Player Music, Master Composer, Advanced Music System, MIDI Music System, Orchestra 85/90, Lyra 1 and 2.

#468: Calamus Fonts #3 -- Advertising, Barnum, Casual, Celtic, Chrome, Flash, Harloe, Mouse, Schoolbook, Western. Includes Atari, MasterCard and VISA logos in .CFN format.

#469: PageStream Font Editor --The official font editor from Soft-Logik.

#470: Clip Art #14 -- People, all types of people in a variety of everyday situations, captured in Degas format.

#471: Clip Art #15 -- More People in Degas format pics. DSLIDE viewing program included.

#472: Instant Graphics! V2.14 -- Revolutionary new way to communicate over the modem in color, sound, and motion. For use with terminal programs that allow the use of Desk Accessories. Users screen rapidly fills with graphic objects in full color... boats, airplayes, saucers, trains, cartoon characters, etc. which are then animated around the screen in concert with a cacophony of beeps, boinks, hoots and grunts. You can even play or hear MIDI music over the modem.

#473: Instant Graphics! Utilities -- Includes editing and graphics creation utility, an in-depth tutorial, and a utility to convert Music Studio files to IG format for playing MIDI songs over your modem.

#474: MiniTerm and MiniBBS --Two Swiss terminal programs. Miniterm is a full-featured desk accessory. Minibbs, a fully operational BBS with up/download, chat mode, and message bases.

#475: HyperScreen and STDCat V4.3--Hperscreen is a useful implementation of the Hypertext concept on the ST. An information storage system that is fast, flexible, and easily tailor-

able. Can be used for many simple tasks, it features an interactive user information tool that goes beyond the simple text editor in retrieving and viewing text, allows manipulation of text and graphics so user gets exactly the information they need when they want it. ST Disk CATalog includes full text search on disk column name, comment, or program name or comment.

#476: Me First--(C) V2.0. Interactive learning games/stories for children. Includes documentation and additional DATA files for extended play.

#477: Class and EZ-Grade--CLASS V2.05, is a combination database and spreadsheet for teachers giving a computerized class roster providing a record of students and their grades. Stores and displays up to 30 grades for each student including GPA Average and the final grade, ranks students on any assignment and calculates current or final averages, determines letter grade, calculates statistics, helps you set and change the ranges and weights for each grade, set a curve, etc. EZ-Grade is a demo of a commercial gradebook program from Integral Software.

#478: SpaceWars--(C) Version 1.0, new outer space shoot-em up game.

#479: Hero II--Demo of the HERO II gaming system includes Dungeon Construction Set, designed to create and manipulate dungeons for the HERO II game system.

New in September

#480D: The Current Notes Catalog--A complete catalog of the nearly 500 disks in the Current Notes ST Library. Using version 4.3 of the ST Disk Catalog program, you can view the directory of any disk in the collection. You can also search on any disk name or program name. To supplement the catalog, a separate folder provides a catalog with a brief description of each disk and a reader program that allows you to search for program names or words that might be in a program description.

#481D: The CN Macintosh Collection--New to the Magic Sac or Spectre Macintosh emulators? Need help get-

ting started? Here, on one disk, is the complete text of all the Magic Sac/Spectre columns published in Current Notes from March, 1987 through July of 1990. Reader program lets you easily read these columns or search for any particular string.

Below are three double-sided disks with some interesting Cyber animations created by Jim Wallace. All will run on a 1040ST. To fill the disks, Jim has included some Neo and Degas pictures that he has made over the years.

#482D: Wallace No.1 -- Cyber Animations: Dr. Who and Who-K9. 6 NEO pics (cigs, dalek, floppy, paper, whobox4, whobox5)

#483D: Wallace No.2 -- Cyber Animation: Albatros. 6 NEO pics(alarm, diner, kitten, marquee, ssmonu, title2). 5 PI1 pics(chocolat, express, house, shawl, unionst1).

#484D: Wallace No.3 -- Cyber Animations: Mad_Max and Megafugi. Marsch.spc, animate4.prg, and spslide.prg.

Disks #485 to #488 were submitted by Charles Gauthier. Charles writes that he has been an Algebra I teacher in public schools for 20 years and has used these programs for years to help his kids and they have really found them beneficial. These programs are all designed to run on ANY ST configuration.

#485: Algebra I: Linear Equations
-- A tutorial program leading the user into correct equation solving techniques from basic properties through fractional equation solving. Within each of the 10 areas of work available, there are as many as 8 different types of problems to work. Help is available at each step.

#486: Algebra I: Verbal Problems
-- Covering 10 of the most common type verbal problems found in Algebra I textbooks, topics like age, coin, investment, motion, number, geometry, work, lever, etc. problems are presented tutorially. There are as many as 5 different types within each area.

#487: Basic Math Skills: Operations -- The user can select to use any size numbers for 1-10 to as large as they want. They can pick adding, subtracting, multiplying, dividing, or a

mixture of all four. They can even select different size decimals, and even integers as well as selecting four ways to present the problems themselves. Top this off with the choice of one of two different arcade type games and the program offers a LOT!!!

accessory) by Martin Backschat and HyperFormat by Claus Brod can format 927K on 83-track DS disk and includes many formatting options. ARC Version 6.02, latest version of ARC compression utility, runs roughly twice as fast as earlier Version 5.21.

#493D: B/STAT -- Version 2.36. B/STAT is a sophisticated graphing and statistical analysis shareware program by Robert Wilson. Requires 1 megabyte and a double sided drive.

#494: Taipan II/GFA Shell Plus -- These two programs were sent in by David Holmes who provides a brief description of each. Taipan II, V1.1: Travel the world during the early 1800s and trade in 15 different items in 15 cities as you engage in combat with enemy ships. This shareware program is loosely based on the game Taipan originally written for Radio Shack computers, but it is much larger and complex. Includes graphics and a mouse interface. Color only. GFA Shell Plus: This shareware program is a replacement for the clumsy Menux program that came with the GFA Basic compiler. It has a much better user interface allowing you to accomplish your work faster.

All *Current Notes* disks are only \$4.00 each (Add \$1 / each 6 disks for shipping and handling up to a maximum of \$6.00. Quantity discounts are available:

10 disks - \$35;
30 disks - \$100;
50 disks - \$150.

CN 44 Mb cartridges are **\$139.95** (+\$3 S&H). Cart 1 contains **112 ST disks** (#347-#459) and Cart 2 contains **80 Spectre disks** (#S01 - #S80).

Order your Carts, ST and/or Magic and Spectre disks from:

**CN Library,
122 N. Johnson Road,
Sterling, VA 22170.**

We accept VISA and MC orders
(703) 450-4761

CN MAGIC LIBRARY

These programs are on ST disks in Magic format for use with the Magic Sac Macintosh emulator for the Atari ST. Some of these disks also work perfectly well with the Spectre Macintosh emulator. All of the font disks, clip art, commercial demos, and hypercard disks will work with Spectre.

Adventure Games

M17: Dungeons of Doom 4.0.

M23: Vampire Castle.

M24: Deep Angst. 1 Mb ST only.

M31: Black Wizard.

M36: Castle of Ert.

M40: Hack. V1.03. incl manual w/docs.

M41: Radical Castle.

M63D: Mountain of Mayhem.

M65D: Deep Angst II

M66: Intruder.

Clip Art**

M33: Clip Art #1--11 screens of clip art plus ViewPaint 1.5.

M52: Clip Art #2--27 screens of clip art.

M55: Clip Art #3--26 screens of clip art.

Commercial Demos**

M37: Mac-A-Mug Pro Demo.

M38: Video Works Player #1.

M39: Anatomiser, DeskPaint, and SuperPaint.

M54: Design.

M59D: Kaleidagraph, Geographics II.

M62: Math Blaster, Blob Manager.

Desk Accessories

M8: DAS #1. 45 desk accessories plus DA Tester 1.5.

M18: DAS #2. Over 25 additional disk accessories.

M46: DAS #3. 36 desk accessories.

Font Disks**

M13: Fonts #1. Akashi, AlgBlurb, Algebra, Athens, Boxie, Dover, Geneva, Hood River, ImageWriter, LED, London, Los Angeles, Luxor, Mars, Monaco, Park Ave, Pica, Ravenna, Rome, Runes, San Francisco, Seattle, Steel Brush, Ultra Bodoni.

M14: Fonts #2. Bookman, Courier, Coventry, Dali, Geneva, Hebrew, Manteco, Shadow Box, Sri Lanka, Times, Walla Walla, and font display 4.6 w/docs.

M16: Fonts #3. Alice, Avante Garde, Berkeley, Broadway, Camelot, Cartoon, Centura, Chancery, Eon, Exeter, Fallingwater, Fantast Key, Fantast!, Future, Ham, Helvetica, Hollywood, Lachine, Lineal, Madrid, Pittsburg, San Quentin, Silicon Valley, Stencil, Unicol plus DAFont2.da and SysFonts.da.

M32: Fonts #4. Canberra, Chicago, Humanistic, Music, New Dali, Palencia Application, Palo Alto, Pioneer Shadow plus F/DA sorter and Font Tester.

M35: Fonts #5. Beehive, Beverly Hills, Boise, Chicago, Courier, DeStijl, Ham, Happy Canyon, Helvetica, Mod. Chicago, Old English, Square Serrif, Sri Lanka, Worksheet.

M42: Fonts #6. Berlin, Boston II, Courier, Dorza, Highwood, MicroBoston, MiniBoston, New York, Palo Alto, Sparta, Stiletto, Symbol,

Tatooine, Venice, Wartburg.

M44: Fonts #7. 42nd Street, Aldous, Art Deco, Ascii, Blockbuster, Border, Clairvaux, Coptic, Deep Box, Ivy League, Klingon, Las Vegas, Little Box, Madrid, Memphis, Minneapolis, Rivendell, Spokane.

M50: Fonts #8. Alderney, Cairo, Cyrillic, Greek, Paint, Playbill, Rehovot, Runes, Washington, Zodiac.

M61: Fonts #9. New Century, Helvetica, Columbia, Minneapolis, Creamy, Palatino, Detroit, and Zap Chancery.

M64: Fonts #10. York, Paint, Mispix, Icon, Cupertino, Arabic, Fallingwater, Schematic, Moscow, and Isengard.

M67: Fonts #11. Cavanough, Icon2, Fletcher, Math-Greek, Toyland, Troyes, Memphis, Provo, Scan, Tombstone, Southbend, Klingon, Wall Street.

Games

M4: Games #1--Backgammon, Bash Big Blue, Curves, MacLuff, MacYahtzee, Maze 3D, Meltdown, Missile Command, Munch, PepsiCas, Smile, Snow, Solitaire, Space Bubbles, Vax Runner II.

M6: Games #2--Ashes, Black Box, Destroyer, HexPuzzle, Killer Kalah, MacPoly Demo, Office Attack, Point Symmetry, Snake, Solitaire, Trophy List, Wall Game, Wheel.

M7: Games #3. Ashes, Break the Bricks, Deep Ennui, Go, Mac Gunner, MacBugs, MacCommand, MacYahtzee, Wiz Fire 1.1

M15: Games #4. Alice, Amps, Bricks, Canfield 2.0, Iago, Lets Get Tanked!, MacHeads, Nim, Space Attack, Third Dimension.

M20: Games #5. Chase'Em, Crystal Raider, Daleks, Golf MacWay, Kill File, Kill, King, King MacWrite, On-The-Contrary, StuntCopter1.2.

M21: Games #6. Guess, Hacker's Contest, Hot Air Balloon, Match, Ramm, Third Dimension, Trick-Track, Utahn Attack, Zero Gravity.

M25: Games #7. Billiards, Cross Master Demo, Flash Cards, Hangman-9.0, MacLuff, Master Guess, Safari 1.0, Venn.

M30: Games #8. Bowl-A-Rama, MacTrek 1.1, Mystery Box 1.0, Shots, Star Trek Trivia Quiz, Window Blaster 1.0.

M34: Games #9. 1,000 Miles, Asteroids, Cairo ShootOut!, Donkey Doo, Duck Hunt, Pente 1.0.

M45: Games #10. Blackjack 4.0, Gunshy 1.0, Humpback, New Social Climber, Panic, Puzzle 1.0, Star Trek Trivia Quiz, VideoPoker.

M51: Games #11. Bouncing Balls, Fire Zone, Mac Word Hunt 2.0, Out Flank, Risk and Word Search.

M53: Games #12. 3D Checkers 2.0, Bills Casino, BMX-The Racing Game, HeloMath, Mouse Craps.

M58: Games #13. Klondike 3.6, Space Station Pheta, Mac Concentration, Sitting Duck, Hot Air Balloon 2.1, Think Ahead+2.0.

M60: Games #14. Golf Solitaire, Mac Football, Euchre 2.2, Gomoku, Pyramid, Checkers, Runaround and Macpuzzle 1.0.

M19: PCS Games #1. Apple, Black Hole, Face, KalinBall, Madonna, Minute-Mag, Patchwork Mess, Phantom, Pure-Gemme, Samurai, The Royal Pain, Wizards Lair.

M29: PCS Games #2. Circus Circus, D&D, Diadora, Max, Merlin, Modern Mistress, Queston, Royal Pain, Twilight Zone, Whazit.

Graphics

M10: Graphics #1. Amy, Artisto, Ball demo, Big Ben, Brooke, Bugs, Curves, Display Message, Dragon, Fighting 51, Fourth Dimension, GARF, HotSex!, Liar's Club, Living Art, Max Headroom, Moire 3.0, Nightmare, Optical Illusion, Paint Grabber, Painter's Helper #1, Pattern, Pisces, Rotations, Saddle, The Fourth Docs, ViewPaint 1.5.

M12: MacBillBoard. Chipmunks, Donald & Daisy, Goofy At Bat, Announcement, Babe Ruth, Carrotprint, Classic illusions, Escher, Escher Hands, MacBillBoard, Max, Mickey and Minnie, Quick Tour, T-Shirt.

M22: Graphics #2. BlowUp 3.0, BlowUp Notes, Calendar Maker 2.2.1, Dynamo, Graphic, Mad Menus, Math21, Rays, Simutree, Spiro, Tree, Vanlandingham.

M26: Graphics #3. 3D Sketch, AniRama, Bin/Graphics, Brownian Motion, Control, Fractal Contours, Fractals, Icon Collector, Julia, Make Paint, Melting Clock, Small View, Shape Art, Star Flight, Window Demo.

M47: Graphics #4. Cursor Designer, Earthplot3, Graphics2, Mondrian1, MotionMaker2, Moving Finger, Wallpaper, Zoomation.

M57: Graphics #5. Micro Film Rdr1.4, Bomber, Iliana II, Preview, Super Ruler 1.1, and XVT-Draw.

Hypercard Disks**

M48D: HyperStacks #1. Address, DataBook, Fractal, Funny Day, Home Desk, HyperNews1.2, HyperZoetrope, MacGallery, Mac-Vermont #2, Notebook, Periodic Table, ResEdit IPS.

M49D: HyperStacks #2. Ear, Illusions, Passing Notes, Shipstack, Silly, US States V2.

M56D: HyperStacks #3. Atkinson's 786K Clip Art Stack (500 clip art pics).

Utility Disks

M2: Telecom Disk #1. BinHex 5.0, FreeTerm 1.8, Kermit, StuffIt 1.0, TermWorks 1.3.

M3: Utilities #1. DES, Font Doubler, Mac-Dump, MiniFinder, PackIt III (V1.3), Reverse Screen 1.0b1, RMover, Scan, Set File, Slicer, Version Reader 1.1, Write Stream.

M5: Disk Librarian. Disk Librarian V1.82A. Includes listing of CN Magic/Spectre Library.

M9: Utilities #2. Bind Icons, Change Appl. Font, Convert Desk Acc, Desk Acc Mover, File Hacker, Font Doubler, Index, Make Screen, MicroFinder, Purge Icons, RamAStart 1.3, REdit, ResEd, Select Paint, Show Version, User Interface Demo.

M11: Print Utilities. Coventry12, Disk Labeler, Fast Eddie, Font Mover, Ink, MacWrite 4.5 to Text, miniWriter, MockWrite, Pica10, ReadMacWrite, Walla Walla9.

M27: Utilities #3. Browse/Shazam!, Clocks: analog & digital, Edit, FEdit 3.0, launch, lazymenu, Magic Beep 1.0, Menu Ed, microFinder, Quick Dir, Quick Print, RamStart2.0+, Road Atlas, ShrinkToFit, SiconEdit, SortMenu, SuperFinder4.0, TabsOut, Unpit, Way Station.

M28: Red Ryder 7.0. Red Ryder 7.0, Red's 7.0 Stuff, RR 7.0 Macros, RR Docs.

M43: Utilities #4. DiskDup+, MacSnooper 1.03, RamDisk+ 1.4, ResTools 2.01, Oasis 2.01, Font Librarian, Switch.

** Spectre 128 compatible.

NOVATARI XL/XE PD Library!

In response to many concerns voiced by our customers, we have decided to revamp our XL/XE selection of library disks. After considering many of the options available to us, we have decided to start a new XL/XE library containing all new titles and a few old ones all put together in a new, consistent format. This format means that the disks will be easier to use and will contain more quality software.

Due to the amount of work involved in releasing fifty new disk titles, the new disks will be appearing at a rate of hopefully five or six a month. The old library will still be available and a list may be obtained from the Mail Order Librarian.

To prevent confusion between the old and the new libraries please use the new three letter and number code to identify orders from the new library.

Attention all programmers! NOVATARI is always seeking contributions to its library. If you've written something you think others would enjoy using or you have something we don't, by all means, send it in. Please remember that all submissions should be public domain or shareware. Disks accepted into the library will be exchanged for library disks on a one-for-one basis. Please indicate your choices when you send in your submissions. Please send your submissions to:

Jeff King
10033 Clearfield Ave.
Vienna, VA 22181

Applications

APP1 – Textpro 4.0 (Latest text editor for the Atari. Works with Mydos 4.50)

Demo Disks

DMO1 – Classic 8-bit Demos (A collection of 7 demos from the early days of Atari.)

DMO2 – 8-bit Graphics Demos (4 of the more recent 8-bit demos.)

DMO3 – Video Blitz (130XE Required) (One of best 8-bit demos ever released.)

DMO4 – German Sound and Graphics (An excellent art and music demo.)

Disk Operating System

DOS1 – DOS 2.5 (An old DOS standby.)

DOS2 – Rainbow DOS (An interesting graphics dos.)

DOS3 – Desktop DOS (A demo of an ST-type desktop for the 8-bit.)

DOS4 – DOS 4.0 (Never officially released by Atari.)

DOS5 – DOS 2.6 (Similar to DOS 2.5)

DOS6 – MachDOS 3.7a (An Atari DOS alternative.)

DOS7 – Mydos 4.50 (One of the best Atari DOS substitutes.)

DOS8 – DOS XE (The DOS released by Atari to provide support for the XF551 drive.)

Game Disks

GAM1 – Text Adventures (Secret Agent, Survival, Kidnapped, Adventure in the Fifth Dimension)

GAM2 – Space Games II (Outpost, Microids, Blockade, Nukewar, TrekST, Maniac Maze, Space Fort)

GAM3 – Machine Language Games (Fifteen fast 100% M/L games)

Graphics

GRA1 – Video 130XE version 2.10 (Requires a 130XE. An image acquisition and processing system. Requires Computereyes to acquire images.)

GRA2 – Video 130XE Images (4 images for use with the Video 130XE program.)

GRA3 – More Video 130XE Images

GRA4 – GIF 2.0 (Allows you to view the high resolution color pictures in the Graphic Interchange Format (.GIF).)

GRA5 – GIF Pictures (Several pictures for use with the GIF Viewer above.)

GRA6 – DRAW 7 (130XE Required. Excellent drawing program that includes animation capability.)

Utilities

UTL1 – Screens (An impressive windowing utility.)

UTL2 – Help Key Routine (Include the HELP key in your own programs.)

UTL3 – ARC/ALF Utilities (Several file compression and decompression utilities.)

Disks are **\$3 each** with \$1 shipping per 3 disks. Send all orders to:

Thom Parkin,
701 N. Sterling Blvd.,
Sterling, VA 22170

Current Notes' Atari Clubs

Members of listed Atari clubs may subscribe to *Current Notes* at a discount rate of \$23 per year or \$42 (2 years)--that's over 40 percent off the newstand price! You may add your club to this list in either of two ways. If you have a club newsletter, add CN to your distribution list. Include a subscription form in your newsletter, or a message explaining the CN discount, that your members can use when they send in their subscriptions. Alternatively, you may become a registered CN club by sending in an initial subscription list of 10% of the membership or 6 members, whichever is less. (It would also help to have a list of club members.) Send to: CN Atari Clubs, 122 N. Johnson Rd., Sterling, VA 22170. For more information, call Joyce (703) 450-4761. NOTE: Australian and Canadian Atari clubs are also eligible. Foreign club rates are \$31/year or \$58/2 years.)

Alabama

Huntsville AUG, Levin Soule, 3911 W. Crestview, Huntsville AL 35816 (205)534-1815, BBS: (205)722-0900.

Arizona

NW Phoenix Atari Connection, Paul Parks, P.O. Box 36364, Phoenix AZ 85067 (602)278-2375.

PHAST, No contact available, Phoenix AZ 85079.

SE Valley Atari Connection, Tim Bar, P.O. Box 662, Chandler AZ 85224 (602)821-1200.

Tucson Atari Central, Sam Furrow, 2116 E. 1st St, Tucson AZ 85719 (602)323-3410.

Arkansas

Little Rock Atari Addicts, Keith Steensma, 28 John Hancock Cir, Jacksonville AR 72076 (501)985-2131.

California

A.C.A.O.C., Larry Weinheimer, P.O. BOX 9419, Fountain Valley CA 92708 (714)969-9053.

A.C.E.S., Luis Outumuro, 16132 Elgenia Avenue, West Covina CA 91722 818-960-7210.

A.U.G.I.E., Don Lucia, 3905 N. Lugo Ave, San Bernardino CA 92404 714-880-3539.

Antelope Valley ACE, Don Glover, PO Box 512, Palmdale CA 93590 (805)272-9084, BBS: (805)723-0093.

Atari Anonymous User Group, Todd Bane, P.O. Box 1433, Upland CA 91786-1433 (714) 737-4329, BBS: (714) 625-4251.

Atari Bay Area Computer Users' Society, Bill Zinn, PO Box 22212, San Francisco CA 94122 (415)753-8483.

Atari Federation, Chester Hadely, P.O. Box 5367, Vandenberg AFB CA 93437 (805)733-4177.

Atari Users' Group of the Inland Empire, Don Lucia, 3905 N. Lugo, San Bernardino CA 92404 (714)883-3547.

Bakersfield ACE, Anthony Garcia, P.O. Box 40203, Bakersfield CA 93308 (805)397-9566.

Cajon Computer Club, Tim Adams, 639 West 36th Street, San Bernardino CA 92405 (714)882-6784.

E.R.A.C.E., Gary Martin, 1906 Avineda Del Diablo, Escondido CA 92025 (619)489-9872.

H.A.C.K.S., John King Tarpinian, 249 North Brand Boulevard #321, Glendale CA 91206 (818)246-7286.

Long Beach ACE, Lee Curtis, P.O. Box 92812, Long Beach CA 90809-2812 (213)423-2758.

N.O.C.C.C. ST-Sig, Dain Leese, 3852 Balsa, Irvine CA 92714 (714)552-5185.

Pass Area ST Enthusiasts, Steve Miller, 1145 west Westward, Banning CA 92220 (714)849-7927.

R.A.M. of Ventura County, Tim McCoy, P.O. Box 1513, Camarillo CA 93011 (805)482-4788.

San Diego Atari Computer Enthusiasts

Thomas W. Briant, PO Box 900076, San Diego CA 92120 (619)581-2477.

San Diego ST Users Workshop, Chester Edwards, 902 Nolan Way, Chula Vista CA 92011 (619)224-5090.

Santa Barbara ACE, Avery Galbraith, P.O. BOX 3678, Santa Barbara CA 93130-3678 (805)687-1075.

Santa Clarita Valley ACE, Mark Ostrove, 19449 Nadal St, Canyon Country CA 91351 (805)252-6881.

Santa Maria/Lompac ACE, Eric A. Daniels, P.O. Box 2286, Orcutt CA 93457-2286 (805)929-3296.

South Bay ACE, No contact available, Los Angeles CA.

The Desert Atarians, Lee Ellis, 47-800 Madison Street #53, Indio CA 92201 (619)342-1600, BBS: (619)342-1647.

West Los Angeles AUG, Bill Skurski, 10393 Almaya Ave, Los Angeles CA 90064 (213)552-4739.

Colorado

Front Range AUG, Jerry Belfor, 3012 Rockborough Ct, Fort Collins CO 80525 (303)223-2604, BBS: (303)223-1297.

Pikes Peak and Poke ACE, Rick Reaser, PO Box 17779, Colorado Springs CO 80935-7779.

Connecticut

AUG of Hartford, William Midyette, PO Box 289, Windsor Locks CT 06096-0289 (203)627-6996, BBS: (203)623-3759.

Fairfield County ACE, Paula Burton, 362 Hattertown Rd, Monroe CT 06468 (203)452-1716.

ST Atari Road Runners, Glen Werner, 1160 South Curtis St, Wallingford CT 06492.

ST Atari Users Society, Brian Rufini, 176 Burnside, E. Hartford CT 06180 (203)289-7903.

Delaware

Dover Users of STs, Al Beddow, 4434 Vermont Dr, Dover DE 19901 (302)697-3830.

Florida

Atari Boosters League East, Hadley Nelson, P.O. Box 1172, Winter Park FL 32790.

Georgia

Middle Georgia AUG, Pete Miller, 115 Feagin Mill Rd, Warner Robins GA 31088 (912)328-8758.

Idaho

Boise User Group, Gary Marston, 607 Fair Ln, Nampa ID 83686 208-467-9946, BBS: 208-336-1156.

Rattlesnake ACE, Carson Walden, 301 Birch St., Mountain Home ID 83647 208-587-7476, BBS: 208-587-7603.

Illinois

Central Illinois AUG, Robert Handley, 1920 East Croxton Ave, Bloomington IL 61701-5702 (309)828-4661.

Eastside Atari Users Group, Hank Vize, 2425 Crisilisa Drive, Alton IL 62002 (618)465-0342, BBS: (618)254-6077.

Galesburg Atari Users Group, Michael Burkley, PO Box 55, Viola IL 61486 (309)596-4152.

Lake County ACE, Dwight Johnson, PO Box 8788, Waukegan IL 60079 (312)623-9567.

ST Information Group, Joe Lambert, 1116 Woodlawn Ct, Pekin IL 61554.

Suburban Chicago Atarians, Mike Breslin, P.O. Box 7226, Roselle IL 60172 () 968-0330.

Indiana

Atari ST Computers in Indianapolis, Daniel W. Ward, 1752 Alimingo Dr., Indianapolis IN 46260 (317)254-0031, BBS: (317)353-9326.

Bloomington Atari ST, Stu Huffman, 1752 Alimingo Dr., Indianapolis IN 46260, BBS: (812)332-0573.

Calumet Region Atari Group, Jeff Coe, PO Box 10995, Merrillville IN 46411-0995.

Eli Lilly Corp ST Users' Group, Karl Werner, Eli Lilly Corp Cntr, Indianapolis IN 46285 (317)276-3020.

Iowa

Midwest Atari Group-Iowa Chap, Gordie Meyer, PO Box 1982, Ames IA 50010 (515)232-1252.

Kansas

Ft. Leavenworth Atari Group, Sir, P.O. Box 3233, Ft. Leavenworth KS 66027.

Lawrence Atari Computer Club, Robert Drake, PO Box 1415, Lawrence KS 66044 (913)842-5961.

Midwest ST Atari Resource, Gary Leach, 7213 Mastin, Merriam KS 66203.

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